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An Introduction to Business

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An Introduction to Business

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PREFACE

Introduction to Business is a required course for all freshmen in the Indiana University School of Business. Students also begin their study of Accounting in the freshman year. In the sophomore year a course in Principles of Economics is required, and students continue their work in Accounting. In the sophomore and junior years students begin their work in the other specialized fields of study.

The function of the course in Introduction to Business, as viewed by administration and faculty, is clear. It is to discover the social setting of business; to relate the business man and business enterprise to the economy as a whole and to its component parts; to describe the major fields of business in terms of functions and opportunities; and to chart the significant relationships of business and government. It is not regarded as a function of the course to attempt detailed technical descriptions of business methods. Neither is the course planned as a training area for any of the major fields of business. It is the panoramic view, the social setting, the economic functioning, which are presented.

This volume is designed to serve as a text for such a course. To accomplish this purpose attention is directed first toward the social setting of business, the historical background and its relation to current trends, the significance of the private enterprise system, and the privileges, duties, and responsibilities of business men in the private enterprise system. The tools of the business man — measuring, organizing, and appraising — are considered next. The three major business areas of production, marketing, and finance are discussed in turn. The purpose of these sections is to present a judicious combination of realistic detail and a broad study of vital economic functions and relationships. The concluding sections examine the role of competition in the private enterprise system, its repercussions in the areas of price policies and risk, the development of business-government relationships, and the special business problems of the war economy.

Throughout this volume it is the aim of the writer to shift the emphasis from facts to underlying reasons, to eliminate useless

memory work, and to minimize technical complications. The selection of questions, problems, and projects and the reading suggestions appended to every chapter are planned to aid in the accomplishment of that purpose. Questions are divided into three groups. Group A is based directly on the chapter material, designed to serve as a check on reading and comprehension. Group B is thought-provoking, leading from the chapter material, but planned to serve as a source of consideration, contrast, and discussion. Group C is a selection of projects suitable for written reports, designed to familiarize students with library materials and to bring them into contact with the business background of the communities in which they live and work.

Mr. C. Ben Dutton, Mr. Henry George, Mr. Neal Gilliatt, Mr. Robert Shaffer, Mr. Bernard Trimpe, and Mr. Donald Wollett have assisted in teaching the course using a preliminary draft of the text and have made valuable suggestions. A number of the writer's colleagues have read critically chapters in fields of their special interest. Miss Geraldine Bariani has offered valuable counsel in connection with the chapter on library research. A special debt for expert and conscientious secretarial assistance is due Miss Janet Hamersly and Miss Mary Jo Tennell.

MELVIN ANSHEN

WASHINGTON, D.C.
June, 1942

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PART ONE

BUSINESS AND SOCIETY

CHAPTER 1

THE BUSINESS WORLD

Business is the way men make their livings. And because there are many men, with many talents and skills, the ways of making a living can be counted by the thousands. They are bound up with every activity of life. The complex sum of these activities we call "the business world."

This multitude of activities, so interrelated and cross-bound that every human unit in our society is inescapably allied to other human units, seems at first glance to be an impenetrable maze. If you were to attempt to thread your way through this maze, you would find it difficult to decide where to enter, how to proceed, where to emerge. Whether you survey it in the volumes of the Bureau of the Census, by personal inspection, by talking to men in business, or by studying descriptions of the economy either as a whole or in sections, you cannot escape the conclusion that this economic society is a peculiarly complex organism. You may well end by wondering how it works as well as it does, even how the men who are part of it find their own paths.

If we attempt to extend our knowledge of the business world we see, at first, a conglomeration of physical things: farms, factories, machinery, railroads, stores, banks, mines, communication systems. We know that these are a vital part of the business world, but we also know that these alone do not form our economy, and that they could exist while men around them starved. These physical things have significance only as skilled men use them with a guiding plan and a realistic purpose. We should, therefore, expand our range of vision to include not only the physical means of production, but also the men who create them and with them the merchandise which is produced and marketed and consumed.

Even this breadth of vision does not embrace the economy unless it includes the intricate mechanism of exchange which permits the worker who spends his day on an automobile assembly line tightening one bolt on a series of half-finished motorcars to be certain that what he earns will be accepted in return for

food, clothing, shelter, amusements, education, insurance, and travel for himself and his family. When our range of vision, as we examine our economic society, has progressed to this point, we can regard it as nearly complete. But it is apparent that there is no simple way to explain the system which relates the tightening of a bolt to food and clothing and rent. At this point we are dealing with the very heart of the economy, and we are dealing with a problem of the greatest social significance.

Difficult as it is, however, we must attempt to find our way through this maze of the business world. The only way to do anything well is to begin by understanding the process. Understanding, in this sense, we can assume to mean something more than accumulating facts. Understanding begins with facts, but the record of facts is only the beginning of thinking. We might assemble a giant list of facts, summarizing all that is known about the number of farms, factories, railroads, and stores, and we should still find ourselves only at the beginning of the task of understanding this business world. The reports of the Bureau of the Census are an invaluable reservoir of facts serving as source material, but the volumes contribute to thought and understanding only when they are used as the basis of analysis. In the course of this study of the business world, we shall cite a number of facts, but we shall be more concerned with what the facts show about the interrelations of human beings, raw materials, machines, and markets. We shall endeavor to use the facts as living things, not as dead records.

As intelligent humans, we should not be willing to participate blindly in anything we do not understand. As future workers in this business society, we should be unwilling to embark upon careers without some understanding of how the economy functions, how individual business units operate, what interrelationships exist, what motives move men in business, and, above all, why.

In undertaking this examination, we shall try to avoid looking at the business world as the universe might appear to a baby, as a great noisy confusion. We shall try, rather, to examine it with the calm inquiring spirit of the intelligent adult, directing the inquiry beyond factual accumulation, and remembering that when we analyze the economic actions of humans (which we might call their "dollar actions") we are analyzing simultaneously their political and psychological actions — we are examining the central mechanism of all human society.

ECONOMIC ORGANIZATION

The history of man's life on earth is a record of social functioning in a series of different economic organizations, ranging from primitive societies ignorant of the techniques of power application or even of the use of such simple tools as the lever and the wheel to the industrialized mass-production society of America today. The primitive human clan, a kind of enlarged family, was one type of economic organization with clearly defined relations between clan members. The military or aristocratic slave state, with its sharp division between the masters and the servants, was another type of economic organization. The medieval rural economy was a third type, distinguished for the arbitrary power of feudal overlords and a stratified class structure in which a man's status was fixed from the day of his birth, and from which he could not escape. Still a fourth type was the merchant or town economy, an organization with a stabilized guild system and carefully regulated trading. These varieties of economic organization may be contrasted with the free-enterprise economy of modern America. Men have organized economically in communist societies, in socialist societies, in fascist societies, and in democratic societies. Apparently, the varieties of economic systems and economic relationships which men may establish is practically endless, and every system may be made to work with reasonable satisfaction for the participating members.

The Fundamental Decisions. It is of the greatest significance to observe, however, that in every variety of economic organization certain fundamental decisions must be made and certain fundamental activities must be performed. Communist, socialist, fascist, or democratic societies have this in common. In all societies, the things which sustain, protect, and enrich life must be produced and marketed. In all societies, men must determine (1) what they will produce, (2) how they will produce, and (3) how they will distribute what has been produced. Without these activities and decisions, the economic organism perishes and human existence cannot endure.

As the ignorant savage must decide whether he will devote a given share of his productive time to hunting, fishing, or agriculture, so in our complex industrial society business men must

determine what use will be made of raw materials, tools, factories, and management. What will be produced? And since the allocation of industrial assets to one production task automatically removes the possibility of employing them for other tasks, the decision carries the implied question: What will not be produced?

As the savage, having determined to spend his day fishing, must decide whether he will try to catch fish by hand, with a spear, with hook and line, or with a net, so the industrial manager must determine how he will produce. He must decide whether he will produce largely with human labor, aided only by small hand tools, or encourage the designing of automatic machines to handle the bulk of the work, with only a small crew of workers as machine tenders.

And as the savage must select some basic plan for distributing his day's catch — keeping it all for himself, feeding only his own family, exchanging it for what other savages have to offer — so the business man must determine how he will market his factory's output. He must decide whether he will sell direct to consumers or through retail stores, and by what routes and through what middlemen his merchandise will be sold to retail stores. Attached to these decisions are problems of price policy, sales promotion, and advertising.

These decisions are an inescapable part of every variety of economic organization. A communist state, founded on the principle of taking from each according to his abilities, giving to each according to his needs, must determine what to produce, how to produce, and how to distribute what has been produced. There is no evading these fundamental questions. Nor can any decision be freed from its bound negative. If we devote plant, raw materials, and labor to the production of gadgets, then so much plant, raw materials and labor cannot be devoted to the production of widgets.

Along with the impelling need for making these decisions in every type of economic society goes the need to decide wisely. To err in the selection of techniques of production and marketing is to waste the vital resources of the community. Adopting any but the most efficient techniques of production and marketing available at any given time and place means that the members of the society receive less than they have a right to expect.

We may therefore conclude that we are embarking on a project

which seeks not only to analyze the functioning of the contemporary American economy, and to discover why it operates as it does; this is a project which also seeks to discover the failure and the inefficiencies of the organism. There is no progress in a static state. The business world is forever in flux, changing, selecting, adapting. This project must concern itself with what is, with why it is, and with what may be.

The American Economy. There is a special excitement in plunging into the middle of things, but it is a dangerous excitement, one that does not aid clear thinking. Before we take such a plunge, it may be helpful to pause and consider the prospect which lies ahead. Let us attempt a brief overall survey of the American economy as it is today. We shall not try, at this point, to make the survey in terms of the specific jobs of millions of business men and business agencies. We shall confine the study to a broad view of the whole economy, and we shall try to reduce to general order what at first glance seems to be nothing but disorder. Remembering that "every age and every people has its character stamped upon it by the way it gets its bread," we may be confident that even the broad view will make a contribution to the understanding of the economy of the United States.

We are 131 million people: farmers, factory workers, miners, engineers, chemists, traders, ditchdiggers, and professional workers. We are a tremendous reservoir of skilled manpower, engaged in a complex of activities that crosscut one another. Each one is dependent on others. The economic organism is intricately knit.

The helplessness of humans cast adrift from the integrated economy is suggested by the estimate that in New York City, in an area in which live more than 8 million people, there is seldom more than 60 days' food supply on hand. An intricate organization of farmers, shippers, transportation agencies, storage agencies, financial institutions, and stores must function daily to feed this mass of humans. Any temporary stoppage of supply may lead, within the space of one week, to social chaos. This relation is no different in the nation as a whole. "New Yorkers make clothing worn in Dakota; the Dakota wheat farmer supplies California with the material for bread; transient labor in California picks oranges eaten in Texas; a Texan drills for oil which will operate automobiles in Maine; and a Maine farmer raises potatoes which feed men in New York."

We might call this integrated economy a "machine." This might, however, divert attention from one of its most significant characteristics: that unlike a machine which is a fixed thing, unchanged until it is worn out and destroyed, the economy continues to change while it works. It throws out new types of merchandise, new ways of producing and marketing. It attempts a hundred variations for one that succeeds and endures. It goes through periods of tremendous activity and periods of acute stagnation. (Between 1929 and 1932 economic activity declined by more than one-third.) Rather than a machine, it is a dynamic living organism which shapes, controls, and supports human society, and which, without skilled supervision, may so dominate human society that the organism will command men before men command the organism.

To bring some logic into the survey, and because the basic purpose of all economic activity is the satisfaction of human wants, we may begin by considering the consumers of the nation. There will follow a discussion of the finite parts of the economy which may be classified as labor, natural resources, the production mechanism, the marketing mechanism, and the organization of business. This will be a preliminary statement, in terms of the greatest simplicity, to which later chapters will return in more complex detail.

AMERICANS AS CONSUMERS

The structure of the buying habits of consumers is the broad foundation of business. Consumers buy what they want; what they do not want they will not buy. But most consumers want more than they can buy. Two limits may be staked out, therefore, in surveying the structure of consumer buying habits. The first is the simple extent of all consumer wants, represented by all the goods and services which 131 million consumers want as aids to their conceptions of full and satisfied lives. These wants change under the impact of fashion, education, social developments, and mechanical inventions, but they are so broad and so universally felt that we may conclude that consumers' wants are endless.

Consumer Purchasing Power. Another consideration places a limit on wants, however: this may be called ability to purchase. Consumer wants may be inexhaustible; consumer incomes are not. This limitation of consumer purchasing power forces each of us to

select from a variety of wants those which he believes to be most important and for which he plans to spend his money. Wants are expressed as effective consumer choices only when they are backed by purchasing power, or, we might say, willingness to purchase must be supported by the ability to purchase before it exerts any influence on the business of supplying goods and services.

In studying Americans as consumers, then, the realistic approach begins with a survey of purchasing power, or money incomes. How many dollars do Americans have to spend? Who has the dollars? Who spends the dollars? How are they spent? These are significant questions for students of the American economy. They are significant questions for business men as well, for the ultimate purpose of all business activity is the satisfaction of human wants.

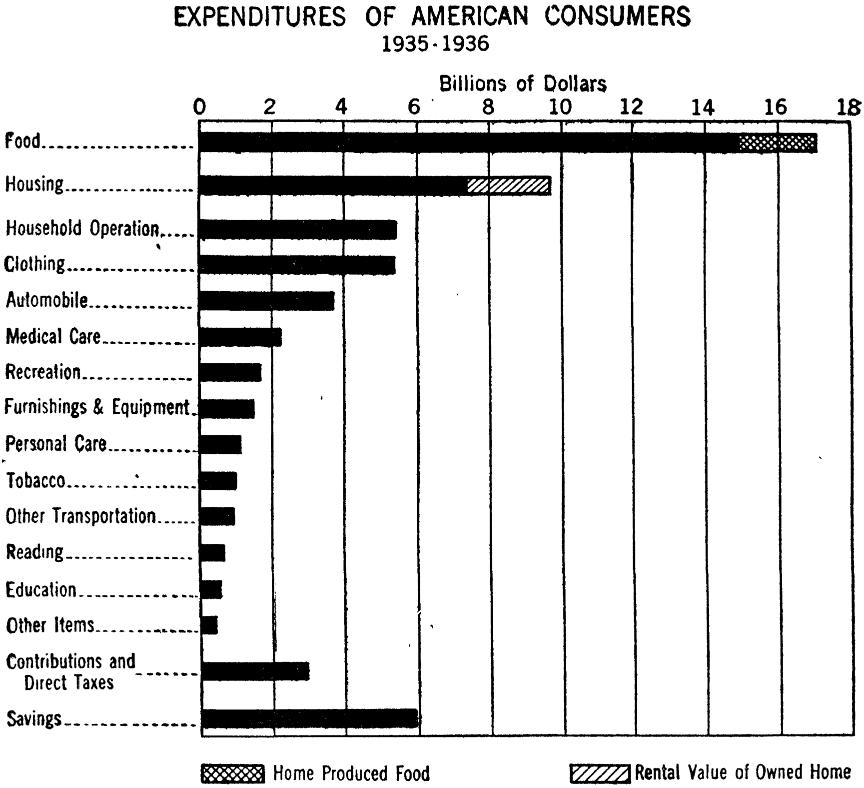
Measures of Purchasing Power. A great deal of unnecessary confusion has been spread by the trite remark that America is the richest country in the world. We may be the richest, but the remark should not obscure the fact that most Americans have low incomes. Examination of the distribution of consumer income, 1935–1936, indicates that in that year nearly one-third of all consuming units (families and individuals) had incomes under \$750, nearly one-half had incomes under \$1000, and more than two-thirds received less than \$1500. At the other end of the scale, only 2 per cent received incomes over \$5000, and less than 1 per cent had incomes over \$10,000. If the total number of consuming units were segregated in two equal parts, the dividing line would be drawn at a little over \$1000. Conclusion: Measured in terms of the number of consumer units receiving these incomes, the bulk of American incomes are low.

This is a classification of incomes by number of consumer units. Shift the spotlight to the aggregate dollars of income received by the various groups of consumers. The group receiving large incomes is so small that in the year of the survey nearly two-thirds of the total consumer income went to consumer units receiving less than \$2500, a group which included 90 per cent of all consumers. Conclusion: Measured in terms of aggregate income received, the bulk of American spending power is concentrated in the lower income groups.

Significance of Income Distribution. Knowledge of this distribution of consumer incomes and purchasing power is vital

to the successful operation of business. Despite the existence of a few industries selling luxury products to consumers in the top income brackets, most modern business methods, in both produc-

CHART 1



Americans as consumers spend money in direct proportion to basic needs. The largest sums are spent for food. Expenditures for household operation, clothing, and automobiles follow. More money is saved annually than is spent for all divisions except housing and food. More money is devoted to charitable contributions and direct taxes than for any one of the following: medical care, recreation, furnishings and equipment, personal care, tobacco, transportation (except automobile), reading, and education.

SOURCE: National Resources Committee, *The Structure of the American Economy*, Part I, U. S. Government Printing Office, Washington, 1939, p. 11.

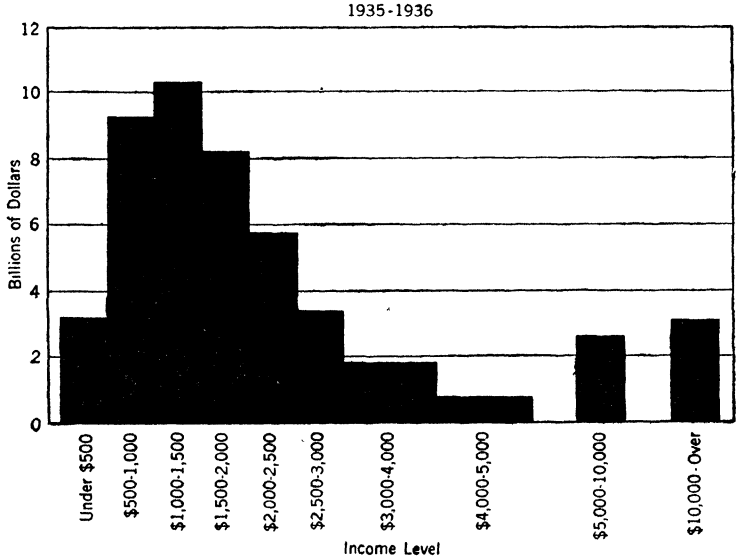
tion and marketing, are adapted to mass selling in mass markets. Further, when the economic machine runs down in a period of depression, all social agencies (business, labor, government, consumers) must evaluate proposals for reform and recovery in terms of this fund of factual information of the distribution of purchasing

power. In order to serve consumers business men must know the volume, location, and disposition of consumer incomes. Agencies concerned with public health and human reclamation must know the precise location of deficiencies in purchasing power. Legislators must consider income distribution, in terms of both consumer units and aggregate spending potentiality, when determining the most desirable apportionment of new taxes.

Consumer Spending Patterns. It is not enough to know how much consumers have to spend; we must also discover what they

CHART 2

AGGREGATE EXPENDITURES FOR CONSUMPTION BY INCOME LEVELS
1935-1936



The bulk of consumer expenditures is made by consuming units with annual incomes of less than $3000. Here is the American mass market.

SOURCE: National Resources Committee, *The Structure of the American Economy*, Part I, U. S. Government Printing Office, Washington, 1939, p. 11.

buy, and how the distribution of income in return for goods and services varies at the different income levels.

Let us begin the analysis with the statement that we have approximately 39 million consumer units in this country, made up of 29 million families and 10 million single individuals. In the year of reference, 1935–1936, the total income received was about 59 billion dollars. Of this amount, 85 per cent was spent for goods and services, 4 per cent was used for gifts and charitable contri-

butions, 1.5 per cent went for personal taxes (income and poll taxes, principally) and the remainder, almost 10 per cent, was saved.

Out of the 50 billion dollars spent for goods and services for current consumption, more than 75 per cent was disbursed for the satisfaction of three major wants: food, shelter, and clothing. Apportionment of expenditures varies between income groups. At the higher income levels, a smaller proportion of total expenditures goes for food and a larger proportion for clothing, automobiles, and education than at low-income levels, while at all income levels about the same share of total expenditures is devoted to housing and household equipment. In general, it may be concluded, consumers spend first on bare necessities, second on desirable utilities, third on luxuries. As total buying power increases, the proportion disbursed for basic necessities tends to decline, while greater emphasis is given to expenditures for better clothing, automobiles, recreation, private education, and saving.

Depression and prosperity periods necessitate adjustments in spending habits. No absolute measurements are available, but it may be surmised that expenditures for durable and semidurable goods are most directly affected. During periods of reduced income, consumers are likely to postpone the purchase of automobiles, refrigerators, houses, and similar commodities, while years of advancing prosperity are likely to be periods of rather rapid acquisition of such goods. It may also be observed that this analysis of spending habits permits forecasting the effect of general shifts upward or downward of the national income upon expenditures for various classes of goods and services. It is possible to calculate, that is, how a total national income of 40, 60, 80, or 100 billion dollars might be spent, if consumer income were distributed in the same proportion as in 1935–1936. This has great significance for both business and social-welfare agencies, inasmuch as there is evidence suggesting that there is no reasonable limit to consumer wants in any of the major expenditure categories. It is clear that the total sum of the wants of American consumers is so great as to constitute an inexhaustible market for the products of American industry, provided that the national income is large enough and so distributed as to place purchasing power in the hands of those willing and anxious to spend it.

AMERICANS AS WORKERS

Striking changes have occurred in the composition of the American working force in the past three generations. In 1870, more than three-fourths of the nation's labor force was employed in the production of physical goods and less than one-fourth in the distribution of physical goods and in service activities. Of the total of more than 13 million gainfully employed in 1870, 7 million were working at agricultural tasks. By 1940, the proportion of the working force employed in agriculture had decreased from one-half to one-fifth. During the same period, workers employed in manufacturing and mechanical industries increased from one-fifth to almost one-third of the total labor force, while the proportion engaged in marketing and in service activities doubled.

This shift in the distribution of labor energy was the direct result of changes in the underlying economic structure. It reflected the increasing use of mechanical aids to agriculture, of machines in mass-production factories, and of man power in the increasingly difficult tasks of marketing. The change has significance for both the well-being and the complexity of the economic and social structure, for it suggests causes for the concentration of people in cities with a consequent drop in the economic independence and an increase in the economic interdependence of individuals.

Labor Power as a Perishable Commodity. The measure of Americans as workers today is a measure of the most significant of the nation's resources. Production rests squarely on the foundations of natural resources, labor, capital, and managerial ability. Of these resources, the supply of labor is in many ways the most important and the one most likely to be wasted. A worker kept in idleness represents a dead loss to society; today's application of his skill cannot be stored and preserved for another day. Unused today, it can never be recovered. Unused today, it forces a decrease in the volume of production and in the national standard of living. It has been estimated that between 1929 and 1937 the loss in national income due to the idleness of men and machines was more than 200 billion dollars' worth of goods and services. To make this statistic real in terms of daily living, let us say that if all men and machines then standing idle had been devoted to the

production of houses, there could have been a new $6000 house for every family in the country. If they had been devoted to building railroads, the nation's railroad systems could have been scrapped and rebuilt five times. If they had been devoted to the production of the entire range of goods and services normally purchased by consumers, living standards could have been maintained at or increased beyond the 1929 level, the health and morale of millions of families would have been preserved and improved, and the billions of relief funds poured out during the period would never have been required.

Measuring the Working Force. Some conception of the volume of man power available for employment may be obtained from the Census of Occupations. On April 1, 1940, 45,326,000 persons reported themselves as gainfully employed. One-quarter of this group were women, three-quarters men. The man power available for employment is not static, nor does it increase in direct relation with increases in the total population of the country. Rather, there is a relationship between the supply of labor and the level of earnings. As the level of earnings rises, the proportion of the population which will seek work decreases. To some extent, of course, higher wage rates will attract more workers. But the major controlling factor appears to be the total family income. A rise in the income of the principal earner in a family, either through longer working hours or higher wage rates, means that there is less need for other members of the family to work. Children remain longer in school, the housewife concentrates on tasks of the home, relieved of the pressure to augment the family income by outside work.

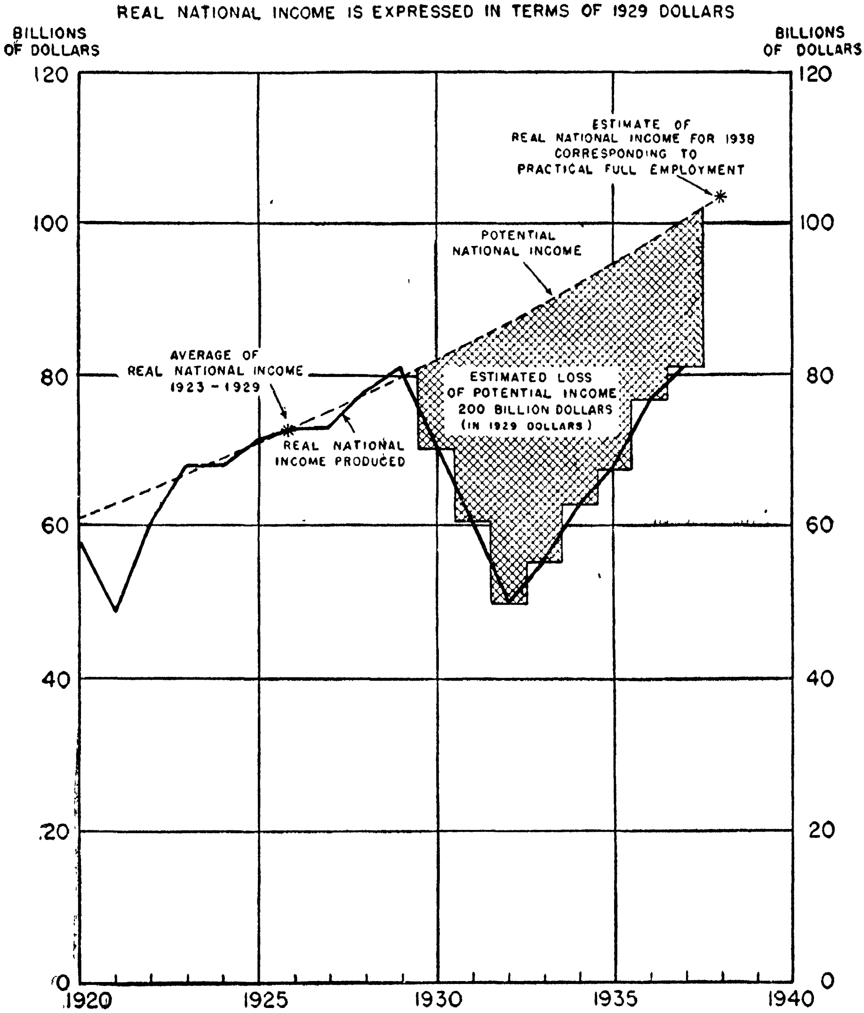
Population and Labor Supply. It is of no slight significance to observe that the changing rate of population growth in the United States is connected with the supply of workers. The cessation of large-scale immigration and the decline in the birth rate are combining to slow the annual increase in the population. We can look forward to the time when this country will have a stationary population, with a larger proportion of old people and a smaller proportion of children and of persons in the age group of vigorous mature workers. Further changes in the composition of the working force will result from social pressures against the employment of children and social provision for pensioning older workers. Continuation of these trends will restrict the employable

CHART 3

LOSS IN POTENTIAL REAL NATIONAL INCOME DUE TO DEPRESSION UNEMPLOYMENT OF MEN AND MACHINES

1930 - 1937

REAL NATIONAL INCOME IS EXPRESSED IN TERMS OF 1929 DOLLARS

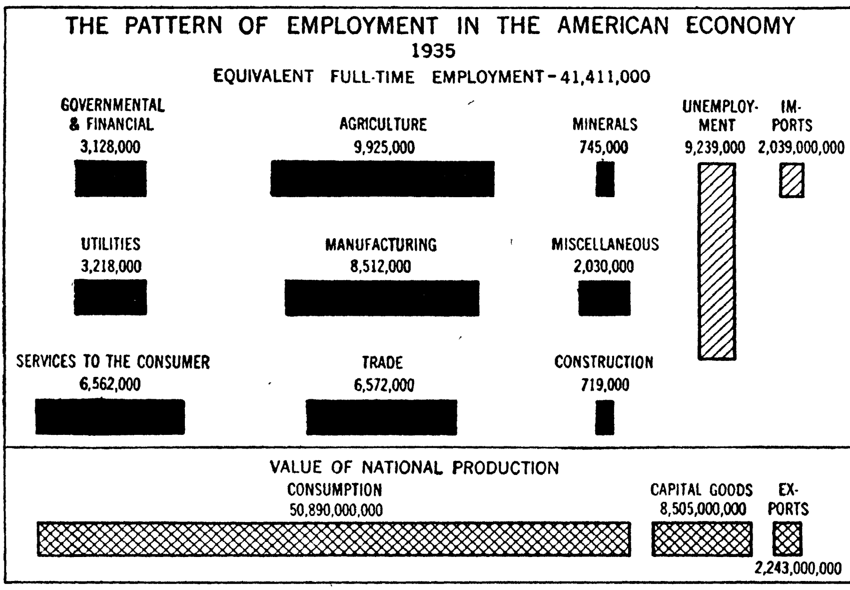


The dotted line marking the upper limit of the shaded area after 1929 marks the probable trend of national income had there been no depression. The shaded area indicates the extent of the loss of income due to the depression.

SOURCE: National Resources Committee, *The Structure of the American Economy*, Part I, U. S. Government Printing Office, Washington, 1939, p. 2.

man power of the country to those age groups best able to bear the brunt of the national productive effort. This should not be interpreted as a background for lessened industrial output. The volume of production is a resultant of the combination of raw materials, machines, labor, and management. These factors of production may be combined in various proportions. A decrease in the working force will be balanced by increased use of machines, including full development of the techniques of automatic ma-

CHART 4



SOURCE: National Resources Committee, *The Structure of the American Economy*, Part I, U. S. Government Printing Office, Washington, 1939, p. 61.

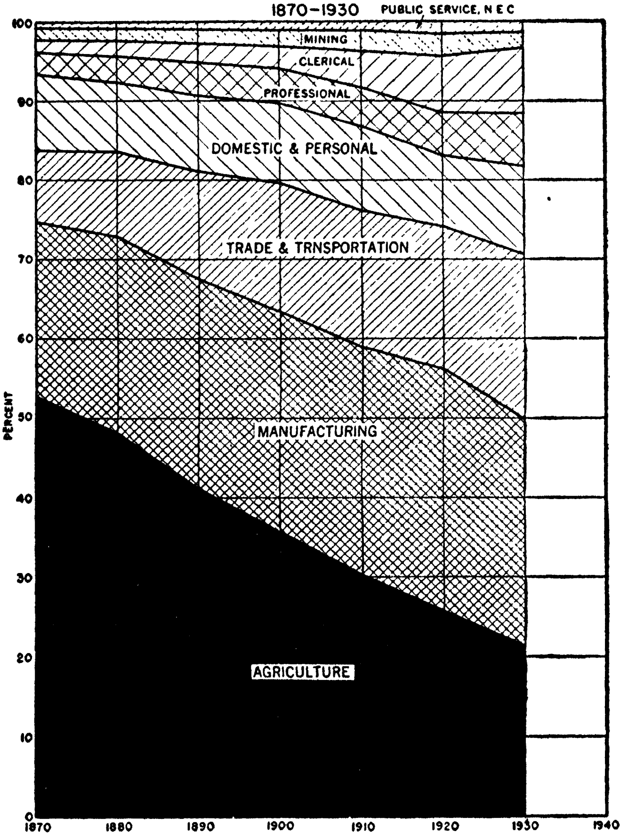
chine function. Industrial production will be achieved in greater volume, with less physical effort.

Labor Productivity. The problem of securing increased productivity by the combination of man power and machine power in a more efficient industrial organization is well understood. During the five-year period from 1924 to 1929, productivity, or output per man-hour, increased 25 per cent. In the following eight years, there was a further increase of 20 per cent. This was secured through increased use of machines and power. An increase in man-hour productivity means that the amount of

human energy used up in producing a given volume of product has declined. This represents within the brief space of 13 years a phenomenal gain in potential output of goods and services for our society. But the gain is potential, not realized, as long as the business economy continues to operate only part-time, matching periods of feverish activity with full employment against periods of

CHART 5

PROPORTION OF GAINFULLY EMPLOYED OVER 16 YEARS OF AGE BY MAJOR OCCUPATIONAL GROUPS 1870–1930



SOURCE: National Resources Committee, *The Structure of the American Economy*, Part I, U. S. Government Printing Office, Washington, 1939, p. 65.

slack activity with an incredible waste of labor power standing idle beside stilled machines.

We shall return to a study of periodic shifts in the volume of employment. But even this brief sketch of Americans as workers

must not fail to observe that violent fluctuations in employment opportunities have been a characteristic of the business world. This is not merely an economic problem; it is a social problem of the most intense reality. Idle men, idle machines, idle money, idle brains can be entered in red ink as losses to be charged against the business world and against the society to the well-being of which the business world contributes.

THE RESOURCES OF THE NATION

The resources of the nation are joined with labor power in the industrial combination which produces the goods that support and enrich life. The structure of our business economy has been largely shaped by the natural wealth of the North American continent. Compared with other nations, the United States is rich in farm lands, basic mineral resources, and forest reserves. The soil and climate will permit the production of most major crops, with the exception of such tropical products as tea, coffee, and rubber. Power can be derived from the great river systems or can be generated from large supplies of fuel. Oceans bounding the east and west coasts add to the food resources.

In addition to the natural resources of the country and the foundation of labor power which has been described in the preceding pages, certain other resources fundamental to the healthy functioning of the economy must be mentioned. Chief among these are (1) the climate and topography which shape and determine the production process; (2) the techniques of production, developed through the slow growth of the nation, the accumulation of invention and adaptation, and the combination of labor and power to drive machines; and (3) the social institutions which frame the business world and guide the relations of men. The quantity and quality of our national resources act as limiting factors or boundary determinants for the full development of the American economy on the basis of its internal wealth. The location of these resources and the manufacturing plants which they feed helps to organize the geographical spread of the economy. The business organization which combines resources, plant, power, labor, and management determines the amount of economic wealth and waste which the industrial system yields.

Dependence on Imports. Although Americans have fallen blindly into the habit of regarding this country as rich in those

natural resources which are the foundations of a great industrial nation, they are not always aware of the exact nature of that wealth or of the extent to which it renders the country independent of foreign supplies. In 1939, 34 per cent of all American imports consisted of tropical products and cane sugar. Imports of minerals amounted to less than 7 per cent of the value of total imports. The significance of this country's normal dependence on imports can be gauged when we consider that imports of tropical products (which our climate does not permit us to raise easily) and minerals (which are not found in quantity within the continental borders) together are equal to about 2 per cent of the value of our annual production. The dependence of this country on imports from foreign supplies of natural resources is slight in relation to total industrial activity.

Nor are these imports generally crucial to the functioning of the economy. Exceptions may be registered for rubber and tin, for nickel and manganese, and several other minerals. Beyond these exceptions the health of the industrial economy rests on a wealth of natural resources available within the continental borders. Present supply and untouched reserves are sufficient to maintain well into the predictable future a rate of industrial activity beyond any yet attained. In this area, the problems of the business economy are concerned not with a limitation of resources to feed into the industrial machine, but rather with the development of the rate of operation of the economy. The problem is one of learning how to secure full utilization of the industrial machine and how to distribute its products in greater volume to more consumers. There is within our grasp an infinitely higher living standard.

ORGANIZATION OF PRODUCTION

Raw materials, labor, and machines are the foundations of the production process. They do not of themselves create production; they are potentials, not actualities. A factory is more than a collection of materials; it is the expression of an organizing idea. It is the idea and the plan which make possible the intermesh of materials, machines, and labor which, in an efficient mechanism, results in production. This is the organizing task which is a major function of business management.

The Function of Management. This organizing function is not

a simple one. The task of managing even a small enterprise presents difficult problems of organization and coordination. How much more complex is the organizing function in those giant corporations which in the past 50 years have moved into dominating positions in almost every sector of the American economy. The management of the American Telephone and Telegraph Company must coordinate the activities of more than 450,000 individuals throughout a nation-wide system. Numerous other business units present equally complex organization problems which involve relations with hundreds of suppliers and tens of thousands of employees scattered over the country in dozens of plants; involve the purchase of raw materials, semifinished parts, machinery, and tools; involve the regulation of the flow of materials and parts so that a uniform rate of production may be maintained without stoppage and without the accumulation of surplus stocks; involve the careful guidance of personnel so that friction between overlapping authorities is minimized and men, machines, and materials are joined uniformly and efficiently. The contribution of management to the careful planning and direction of business organization is as vital to the healthy life of the economy as are materials, machines, and labor power.

The problem of organization exists not only within the individual business concern, but also throughout the economy between one concern and another and between business concerns and their customers. It should be observed that these relationships are not established and maintained by a system of laws. The business economy is influenced by the legal system. But the vital economic relationships which make up the continuous structure of society are largely supported by custom and tradition, by established ways of doing things, and by the mechanisms of buying and selling through which the activities of thousands of individuals and business units are brought into relationship with one another. Business activity is not legally determined. It is influenced by many things of which the law is only one. It is the child (1) of necessity, (2) of custom and tradition, (3) of market relationships established by buying and selling and prices, and (4) of a system of laws. No one is dominant. Each contributes to the smooth functioning of the economy as a whole.

Varieties of Economic Units. Some measure of the size of the administrative task may be secured from a consideration of the

varieties of economic units which operate in the economy. The units range from isolated farm and tiny retail store to giant corporation, and from village to Federal government. The simplest description which can be offered is that the American economy is made up of millions of small business units (farms, small factories, small stores), and several thousand large business units (giant factories, transportation systems, chain-store organizations). Despite the existence of an overwhelming number of small business units, the characteristic feature of the economic system and the most influential part of it is the large unit. It has been estimated that more than one-third of the manufacturing plants of the country is operated by the 100 largest manufacturing corporations. These corporations employ one-fifth of all the man power engaged in manufacturing. Thirty banks hold one-third of the banking assets of the country. Seventeen life-insurance companies control more than four-fifths of the assets of all life-insurance companies. Large corporations control the production of most of the iron ore and hard coal and are significant factors in the extraction of other minerals and of petroleum.

In the area of wholesale and retail trade, although mail-order houses, department stores, and retail chains are important, the dominance of large units is less clearly established. The importance of small units grows as the examination turns to agriculture and retailing. Of nearly seven million farms, only a tiny proportion employ more than five persons, while almost one-third of all retail sales are made by small independent stores employing only one or two people. Altogether, approximately one-third of the nation's economic activity is carried on by units giving employment to less than five persons.

The Growth of Large Units. The relative importance of the large business unit has been steadily increasing throughout the history of the growth of the nation. This reflects the shift from an economy essentially agricultural, characterized by the small farm, to an economy essentially industrial, characterized by the large factory. The shift is one which naturally draws the larger enterprise into a more significant position. Study of the operation of our economy has not yet made clear all the reasons for the growing power of larger units. We do not yet clearly understand whether the forces are entirely natural, reflecting the growth of an industrial system, or have been assisted by attempts to control the economy, to

stifle competition, or to amass economic power. We are not yet thoroughly aware of all the conditions which enable large units to dominate some types of enterprise while in other types small units continue to be the characteristic organization. Nor is there full understanding of the relative efficiencies of large and small units in different fields of business, or of the most desirable size of enterprise in farming, in manufacture, and in trade. Further, there may be a conflict between the economic and the social evaluation of the most desirable size of business unit. We can only observe that this change in economic organization has occurred and that these problems remain to be solved.

MAKING THE ECONOMY WORK

We are launched upon a study of the business world which is directed at these ends: (1) to develop clear understanding of economic organization and business activity, as a replacement for an impression of chaos; (2) to appraise the extent to which the capitalistic private-enterprise system which is the inheritance of our society develops effective use of available resources; (3) to evaluate recent changes in the organization of business, particularly with respect to possibilities of taking full advantage of modern technological developments while maintaining the greatest possible range of liberty for individual freedom of action in a private-enterprise system; (4) to examine the interrelationships of business and human society in the United States.

No student of these problems would suggest that they are either simple to understand or easy to solve. Perhaps the most that can be done is to lay out in easy and comprehensible sections the structure of American business and to offer that as a background for further study by students of business and practicing business men. Without a basic knowledge of how the business world functions we can hope to understand neither why it does not perform so efficiently as it might nor how its level of performance might be improved. Not even the problems of internal business management can be stated with clarity unless business administrators have an understanding of the relation of the parts of the economic organism. And it is becoming increasingly clear that social thinkers who project their ideas without building on a solid foundation of a thoroughgoing familiarity with business activity are projecting "into the blue" theories which can never be realized in practice.

This approach to the examination of the structure of business organization must move at two levels. The first is the over-all view of the economy as a dynamic functioning whole. The second is the narrowed appraisal of selected sections of the economy. The approach, it should be added, suffers from a dual handicap: (1) the business world is too far-flung and too complex to be brought within the covers of one volume; (2) for large sections of the economy an enormous amount of research remains to be completed, so that we shall be compelled to utilize incomplete crude data, material which represents little more than an approximation of the truth.

To make an approach, however fragmentary the material and unsatisfactory the anticipated result, let us start with an attempt to describe the foundations of the private enterprise system and the place of business men in the system, beginning with first developments in their historical setting. Having placed the business man in his environment, we may proceed by describing the tools with which he operates and move, thence, into a consideration of a series of sections of the economy at work, in production and distribution and in such facilitating activities as finance and transportation. Finally, by endeavoring to describe business-government relationships and the problems of social control attached thereto, we may end with some insight into the position of the business man as a member of society and of business activity as a social force.

DEFINITIONS

Economy. The organization of the process of making a living, including the web of production and marketing, incomes and how they are spent, and the amassing and sharing of the resources of the country.

Factors of production. Raw materials, machines, power, labor, and management.

Fundamental economic decisions. Deciding: (1) what to produce, (2) how to produce, (3) how to distribute.

QUESTIONS, PROBLEMS, PROJECTS

A

1. In what general characteristics does America today differ from the America of 100 years ago?
2. What characteristics of production distinguish our industrial civilization from earlier and simpler societies?
3. What three fundamental problems must be solved by all types of economic and social organizations?
4. What is the basic purpose of all economic activity?

5. Is willingness to buy an adequate definition of consumer demand?
6. What income group contains the bulk of the American income?
7. Contrast the proportion of the population engaged in actual production and distribution during 1870 and in 1940.
8. Will the population of the United States continue to increase?
9. What part do natural resources play in determining our national (internal) wealth?
10. Is it technically and mechanically possible to obtain a higher standard of living for all Americans — without adding to the present productive capacity?
11. What sector of our economy is still dominated by the small unit of production?

B

1. We have discussed the almost impenetrable maze of interlocking human activities that make up what we call "the business world." Some day you will occupy a position in some part of it. Have you ever thought of how to find your proper place? What steps are necessary for you to do this?
2. Have you heard anyone mention some advantages of a socialistic or communistic society not found in our present system? What are they? Why are they not present under our system?
3. What is the logic behind the decision to discuss consumers first in the American economy?
4. America is often spoken of as the richest country in the world. Could the majority of American citizens be poor, even with a much higher or larger national income? How?
5. The present method of distributing the national income is at least semi-individual and semivoluntary. The worker makes a bargain with the employer for payment for required services. Investors are paid an interest for use of their funds. Can you think of a better way of distributing the national income? What? Why is it better?
6. We have seen that about half the workers in 1870 were connected with agriculture, but that in 1940 only one-fifth of the workers were in the same field. What was necessary before such a large proportion of workers could shift from the farm to the city?
7. Labor is one of the most important national resources. The decreasing birth rate indicates this resource will become less and less. How can this decrease in man power be balanced to maintain or increase the national income?
8. Because of the present shift in the age composition of the American people, old people will come to form a constantly increasing proportion of the total population. As the number of people above fifty years increases, fewer and fewer workers will have to support more and more idle people. Do you think this will be reflected in a higher or lower standard of living? Why?
9. Within the American boundaries are large and varied natural resources. The American people have mastered the art of utilizing them. Today we seem to be able to produce far more than we can distribute. What seems to be the main trouble leading to what some economists call "underconsumption" or "overproduction"?
10. As the coordinator of men, materials, and machines in producing and dis-

tributing the nation's goods, management plays a vital part in the national welfare. This management, from the corner grocer to the giant corporation of the American Telephone and Telegraph Company, is measured by one single yardstick. What is it? Do you think this yardstick results in the maximum production and distribution of goods?

11. During the past 20 years, government has come to play an increasing part in controlling and directing business activities. How can you justify this?
12. Does the modern industrial system require more or less cooperation than the early systems of economic organization? Why?
13. It is often asserted that consumers control the working of the business system. Is this true? How can such a control be effective?

C

1. Prepare a report surveying economic interrelationships in your home community. What are the significant points of organization and cooperation? What would be the results of the sudden closing of the leading industrial concern? The leading bank? The largest retail store? What would be the result of a prolonged breakdown of electric power? What would be the result of the construction of a large new factory in the community? Who would benefit directly? Indirectly?
2. Read *Middletown in Transition*, by R. S. and H. M. Lynd, and write a report on the economic organization of Middletown.

SUGGESTED READING

Lynd, R. S. and H. M. Lynd, *Middletown in Transition*, Harcourt, Brace and Company, New York, 1937, Chap. 1.

National Industrial Conference Board, *Enterprise and Social Progress*, New York, 1939, Parts I–V.

National Resources Committee, *The Structure of the American Economy*, Part I, U. S. Government Printing Office, Washington, 1939, Chaps. I–VI.

—— *Technological Trends and National Policy*, U. S. Government Printing Office, Washington, 1937.

Slichter, S. H., *Modern Economic Society*, Henry Holt and Company, Inc., New York, 1931, Chaps. I, III.

CHAPTER 2

THE HISTORICAL BACKGROUND OF MODERN BUSINESS[1]

Modern business represents the inheritance of a complex history of commerce and industry stretching back through hundreds of years of recorded history. Custom, tradition, invention, and legislation have all contributed to the development of an intricate web of economic organization. A continuous pattern of change can be observed as business men have copied, adapted, and created forms of business enterprise, enlarged the areas of trade, adapted to social advantage the discoveries of chemists and engineers, and devised the instruments of finance and the dispersion of risk. It is a pattern of related growth, with every part bound to other parts and every advance in technique resting on a history of economic and social usage.

The history of economic development still awaits full exploration. Much is known about business growth in the past two centuries. Little is known about earlier forms of business enterprise. The long, slow dawn of early human history remains largely a field of supposition and surmise.

TOWARD THE VILLAGE ECONOMY

The Hunting Economy. At one stage in traceable history men were hunters and fishers. These primitive humans were largely self-supporting. Tools were as simple as bow and arrow, fishhook and line, boomerang and fire drill. Of the fundamental factors of production, land (natural resources), labor, capital (machines and tools), and management, there were only rudimentary forms of the first three. Management was of little significance when trade was nonexistent.

The Nomadic Economy. A later stage has been termed a "nomadic economy," the years of the wandering tribes journeying from one pastureland to another, a period in which out of hard

[1] The discussion of the historical development of business in this chapter follows that of N. S. B. Gras in his *Business and Capitalism*, F. S. Crofts & Co., New York, 1939, and employs similar terminology.

experience came skills in the domestic control of animals and the cultivation of the soil. There was as yet little disposition to settle in one place and remain there. The possessions of men increased, measured by the size of the flocks and the extent of plowed land. From small beginnings grew an irregular type of trade, characterized by an exchange of articles of domestic production.

The Village Economy. At a still later stage in human history is found the village economy. The wanderers of the nomadic economy settled in permanent dwellings and the cultivating skills were practiced in successive generations. The accumulation of capital, in the sense of houses and barns, carts, plows, and harness, granaries and field tools, grew at an increasing rate.

Throughout these centuries, however, there was little activity which could be called "business." The economy was one of individual self-sufficiency. Few men produced more than their families could consume; there were no surpluses to exchange. Men had begun to scratch the earth's surface for food, to live in permanent settlements, to accumulate enduring possessions, to manufacture hand tools. But men were still general producers, not specialists; self-sufficient, not interdependent. Even the concept of private property had to be hewed out of vague co-ownership practices of nomadic tribes, and the ritual of the inheritance of land and buildings had to be firmly established in the code of social practice. At this stage the fluid lines of human social organizations began to harden. The transfer from one economic class to another became more difficult. The customs of personal and commercial relationships were breeding into that pattern of determined habit which is the inevitable foundation of the common law.

The Origins of Private Business. Private business could have developed on no other foundation than that of the craftsman specialist. When one family provided all its needs out of its private reservoir of traditional skills, there was neither surplus to exchange nor other goods required. It was only when men began to specialize in those crafts for which, as individual workmen, they possessed talents above the average, that there appeared surpluses of shoes, clothing, household furniture, and kitchen utensils. Surplus products of one specializing craftsman could be exchanged for surplus products of other specializing craftsmen. It was from this first exchange of surpluses, based on the exercise of special skills, supported by father-to-son transmission of craft knowledge and by

local advantages of raw material supply and climate, that the entire system we call "private business" grew and prospered.

Although scattered information indicates the development of interesting variations of private business in Babylon earlier than 2000 B.C., in Asia Minor, and in the spreading Greek and Roman empires, the major significance of business history for modern business can be gathered from the study of the period following the end of the sixteenth century. As late as the end of the eighteenth century, indeed, it is probable that there had developed only two types of business men, who may be called "petty capitalists" and "mercantile capitalists."

THE PETTY CAPITALIST

The best examples of petty capitalists were the first small specializing artisans who opened their own shops to sell the products of their handicraft. They were weavers, dyers, shoemakers, blacksmiths, and workers in pewter. There were also small storekeepers who sold at retail the products of country artisans. In this group can be listed the vintners, drapers, ironmongers, salters, and spicers. Another group of petty capitalists were traveling merchants, peddlers of their day, who journeyed from one part of the country to another and even between countries. They represented the principal means of exporting and importing and contributed, through the codification of trade customs, to the development of a body of law and set of procedures which have had great significance in the legal framework of business. This "law merchant" was, in more recent times, absorbed into the great fund of the common law.

Contributions of Petty Capitalists. These petty capitalists were the first independent business men. They broke free from the restraints of the feudal system and the ruling church and established the basic principles of independent economic activity which have been the backbone of private business to this day. They helped the growth of cities by providing flow channels for the distribution of vital merchandise to urban dwellers who might otherwise have found uncertain even the daily supply of food and clothing. They relied primarily on their own savings, reinvested in their enterprises, but they were among the first to experiment with the techniques of borrowing money to finance business ventures. Through the daily operation of their affairs, they were among the early experimenters with such business devices and instruments as

the techniques of accounting, formal relationships with employees and customers, partnership, agency, brokerage, contracts, and trade associations.

Trade Associations and Guilds. The early trade associations or guilds were among the most interesting and significant developments of the petty capitalists. The guilds grew out of the desire to regularize trade practices and to establish self-policing organizations for mutual protection. The first venture in this direction was the general or merchant guild composed, in each town, of shopkeepers, traveling merchants, and artisans. As early as the twelfth century in England, the general guilds were splitting up into craft guilds, each composed of individuals engaging in single occupations as weavers, shoemakers, and bakers. The rules of the guilds were the first written expressions of codes of business ethics. They covered such diverse matters as fair dealing between business men, quality of workmanship, and the hierarchy of apprentices, journeymen, and masters.

THE SEDENTARY MERCHANT

Mercantile capitalists represented a development in economic importance beyond the compass of petty capitalists, and a further range in the stabilization of business practices. The dominant business figure of this period has been called the "sedentary merchant" or "merchant capitalist." He represented the growing strength of capital accumulation, the enlarging scope of the economic power of single enterprises, and the emergence of administration in the sense of control and organization of resources, labor, and money, as a significant factor in business activity.

Character of Sedentary Merchant's Activity. The most significant aspect of the sedentary merchant's activity was that while his enterprises, his investments, and his interests spread out over increasingly larger areas, he did not personally engage in the detailed work of the business but concentrated on the tasks of management. In a sense, he was the first big business man. Coming into prominence between 1300 and 1800 A.D., the sedentary merchant broke down the specializing functions of the petty capitalist. He was usually active as importer and exporter, as wholesaler and retailer. Often he owned and operated his own ships which he used to transport not only his own merchandise, but also, acting as common carrier, the goods of other business men.

He aided in the development of early forms of insurance, particularly against the risk of loss of merchandise and ships at sea. Frequently he engaged in banking, accepting money on deposit, making loans, and arranging for the transfer of funds from one country to another.

Among the forms of business enterprise to the development and stabilization of which the sedentary merchants made significant contributions was the incorporated joint-stock company, the forerunner of the modern corporation as a device for uniting in one great pool the accumulated small contributions of a number of business men. Through the joint-stock company, typified by the East and West India Companies of France, Holland, and England, business men were able, for the first time, to engage in substantial ventures requiring large amounts of capital far beyond the resources of even the wealthiest individuals.

By the fifteenth century the sedentary merchant had become an important figure in the business life of Italy and by the middle of the following century, in Germany. He was strongly entrenched in England in the hundred years between 1650 and 1750, while in the American colonies, largely as a result of the colonial economic policy of Great Britain, the sedentary merchant class developed slowly and never duplicated the European history. Many sections of the United States moved directly from the economy of the petty capitalist to the stage of giant industry.

One Example of a Sedentary Merchant. One of the best examples of the diversified business interests of the sedentary merchant is supplied by John Hancock, a colonial merchant and later a prominent signer of the Declaration of Independence. Graduated from Harvard College in 1754, Hancock was apprenticed in his uncle's merchandising business and spent several months in London, studying the other side of the colonies' foreign trade. As a business man, Hancock's interests extended into practically every aspect of colonial economic life. He was exporter and importer; acted as purchasing agent for others and employed agents himself; operated ships to carry his own goods and served as common carrier for the goods of other merchants; accepted money placed on deposit, paid interest thereon, and undertook to transfer funds abroad; operated both wholesale and retail establishments dealing in such a varied assortment of merchandise as account books, *Aesop's Fables,* blankets, buckram, butter, buttons,

canvas, cartridge paper, cloves, combs, fans, felt hats, handkerchiefs, hatbands, hosiery, indigo, leaf twist, mackerel lines, mitts, molasses, nails, paper, pepper, pigeon shot, pork, ribbon, rigging, salt, sea coal, tea, trunks, window glass, and wines. In addition, he was by reputation one of the most adept smugglers of his time.

Increasing Complexity of Economic Life. The period which witnessed the rise of the sedentary merchant was remarkable for a number of developments in the increasingly complex web of economic life. Step by step, beginning in the largest centers of population and spreading out to the smaller towns, the old self-sufficiency was breaking down. Even petty capitalists were specialists to the extent that their lives depended on trade and the exchange of goods. Under the growing economic power of the sedentary merchant an increasing section of the population shifted from the status of independent specialist to that of dependent wage worker. With the extending police power and the widespread acceptance of the money mechanism as a substitute for barter, the web of economic interdependency was spreading over wider areas. At one time individuals had been self-sufficient. By the middle of the eighteenth century self-sufficiency had disappeared from small localities and even large sections of a country, and the mercantile policy followed by England was entangling the vital economic interests of the mother country with those of her colonies by endeavoring to maintain the latter as suppliers of raw materials to the manufacturing establishments of England, and as markets for her finished goods.

The Instruments of Business. The devices and instrumentalities without which private business could not be carried on effectively were being shaped at the same time. By the middle of the fifteenth century the model of double-entry bookkeeping, the foundation stone of modern accountancy, had been placed on a firm basis. In their banking activities, sedentary merchants worked out the concepts of the principal financial instruments such as the deposit, the loan, the bill of exchange, and the circulating note. Insurance brokers were active by the late sixteenth century and the principles of premium payment and full recovery for loss on insured goods were well established. Nor should we neglect to mention that the navigating instruments and the knowledge of the movements of celestial bodies, which alone made possible the great voyages of the explorers of the fifteenth and sixteenth centuries, were based upon

social pressures initiated in large part by the merchants' desires to extend the boundaries of trade. Through their ceaseless experimentation with business techniques, sedentary merchants explored the devices of partnership and agency and made a giant stride toward the classification of the duties and responsibilities of these economic relationships which have been inherited, almost without change, by modern business, and have become deeply embedded in the frame of the common law.

Mercantilism. As a controlling mold for that whole economic system dominated by the sedentary merchant can be observed the national economic policy which is called "mercantilism." Mercantilism suggested the projection of the policies of the sedentary merchant on the national scene. It was, in a sense, the last of the major contributions of the sedentary merchant, of which the first may be noted as the supersedure of the petty capitalist, and the second as the transformation of the village into the metropolitan economy.

Mercantilism was a national economic policy directed toward the development of a strong economic nation, concentrating on industrial progress, fed by colonial possessions serving as suppliers of raw materials and customers for manufactured goods. It was a policy directed toward securing an excess of exports over imports, in this way making possible a constant inflow of precious metals which served, within the mercantile state, to exercise a buoyant influence on industrial progress. It was a policy of national economic management parallel to and consistent with the administrative outlook of the sedentary merchants who served as the informing centers of the system.

Growth of Cities. And finally, we must notice the close connection between the development of the class of sedentary merchants into controlling economic positions and the growth of cities into the pattern of metropolitan communities. The petty capitalist was the business man of the village and the small town. His commercial connections seldom extended beyond the immediately surrounding territory. The mercantile capitalist expanded his operations beyond the borders of nations and, by weaving a network of commercial relations to support a growing volume of business transactions made possible the interdependent city life. He made possible the functioning of the "market" as the place of assembly for many buyers and sellers of similar commodities, where exchange was facilitated by quick price adjustments.

THE INDUSTRIAL REVOLUTION

The most important single force in the development of modern business and in the shaping of the political, social, and economic orders in which we live was the Industrial Revolution. So significant a development should be capable of exact definition, yet it is interesting to observe that one can ascribe to the Revolution neither a single significant act nor a single date. It was, in many ways, as influential a factor in shaping economic organization as was the Italian Renaissance in influencing the artistic and intellectual revival of the fourteenth and fifteenth centuries. Yet concerning its nature much misunderstanding has arisen. Its influence upon succeeding generations of business men was powerful and unmistakable. Yet it is impossible to date either its inception or its full maturity.

Essentials of the Revolution. In essence, the Industrial Revolution was the process of rationalizing production techniques in two ways: (1) the discovery of the mechanical use of power; and (2) the discovery of how to replace hand labor with power-driven machines. The Industrial Revolution began to make itself felt when Arkwright, in 1767, devoted himself to the study of spinning machinery. It advanced a giant's stride when, in 1790, a Boulton and Watt steam engine began to operate an Arkwright spinning frame. And it continued to influence the organization of business activities by the introduction of forces of change from the third quarter of the eighteenth century through the middle of the nineteenth century.

Effects of the Revolution. So complex were the spreading influences of this new era of power and machine production that there is time here to call attention to only three areas of the economic world in which notable results were achieved: (1) the reversion to specialization in business, following the diversification of interests under the sedentary merchant; (2) the introduction of the factory system and the revival of the significance of production as against trade; and (3) the development of regular, safe, and rapid transportation of men and merchandise.

Reversion to Specialization. It is clearly established that one distinguishing feature of the business man under mercantile capitalism was his tendency to diversify interests, spread risks, and

extend operations into a number of occupations, often with only a slight inner relationship. Under the system of industrial capitalism brought on by the Industrial Revolution, specialists replaced sedentary merchants. Importing and exporting, wholesaling and retailing, transportation, manufacturing, banking, and insurance one by one came into the hands of specialized business men and firms.

There were two observable causes for this great change. The first arose within the frame of sedentary merchant activities as opportunities presented themselves, particularly in banking, to profit by concentrating capital investment and managerial skill. Some evidence of a trend in this direction was becoming apparent even before the onset of the early stages of the introduction of the power-driven machine. The second came directly out of the scale of industrial enterprise brought about by the Industrial Revolution. The sedentary merchant had dealt with production only through the small artisan and his staff, so that there always existed behind the facade of the successful merchant a foundation of petty handicraft based on manual labor and hand tools. The power-machine child of the Industrial Revolution required for its full exploitation large factories and the extensive investment of capital funds in *single enterprises.* This could be accomplished only through a concentration of capital funds and of administrative attention within a limited orbit. To compete effectively in the new order, the sedentary merchant had to become a single-purpose manufacturer, or to select one of the many other functions he had previously performed and concentrate his investment and his managerial skill.

The Factory System. The introduction of the factory system brought profound social and economic changes. The independent artisan was displaced in all but the most backward communities, and for all types of merchandise except a small group of luxury goods handled by workers in precious metals and the fine arts. Along with the independent artisan went the home handicraft families employed on a piecework basis by business men who supplied materials and purchased the finished product. Workers were concentrated in factories. Hours, wages, and conditions of labor were standardized, frequently, it must be remarked, at levels which seem brutal to the critical modern eye. Specific techniques of labor were broken down into simple, routine, repetitive tasks. Machines were then devised to perform the greater part of the

manufacturing job, and workers were employed largely as machine tenders. Men, women, and children crowded into factories which, under a management new to administrative tasks and devoid of an understanding of the social responsibilities of business, offered conditions such that they were described as little better than "dark satanic mills." The chaotic characteristics of an era of change can be found by any student of the history of business. These included the growth of factory communities with depressing slum areas and the hardening of lines of class stratification.

The Industrial Revolution had the dual result of directing the attention of the best brains into production, and of forcing the development of the arts of management. The solutions of technical problems of production and of difficulties presented by a multitude of possible combinations of resources, labor, and machines were a constant challenge to business administrators. Under the iron law of compete or perish a veritable business revolution was accomplished within the space of two generations.

Expanding Trade Areas. As the factories grew larger, under pressure to wring the full measure of efficiency from power-driven machinery, marketing problems became more complex. In the pre-Industrial Revolution economic system — the system characterized by the petty artisan and by household manufacture — the goods turned out by each little producing unit could be disposed of in the immediate neighborhood. Although the sedentary merchant expanded trade and marketing areas, much business activity generally continued to be local. Producers frequently dealt directly with consumers. During the early part of the nineteenth century, direct contact between producers and consumers was abandoned in industry after industry. The growing size of producing units, partially induced by opportunities for lower manufacturing costs by the application of power on a large scale, forced a steady widening of the geographical area within which each industrial unit might dispose of its product. The village shoemaker sold his shoes to his neighbors. The shoe factory had to seek customers in several cities, in order to sell the output of high-speed production. The growth of producing units first disclosed the opportunity to reduce manufacturing costs and then, to make the economies possible, thrust the burden of selling the output on a system of marketing still in the developmental stage.

Transportation Developments. The task thrust upon the

marketing or distributing sections of the economy would have been insuperable had not the Industrial Revolution made possible significant developments in transportation methods. When markets grow, the transportation system provides the key assistance in making possible rapid, safe delivery and the maintenance of continuous supply lines. To this end, first the extension of inland waterways and coastal shipping, and then, in the second quarter of the nineteenth century, the spreading network of steam railroads made important contributions.

With the growth in the burdens of marketing, induced by industrial specialization in large producing units, specialization in distribution began to replace diversification. The first period, extending roughly from 1790 to 1840, was one of intense concentration of business interests on production problems. Wholesaling was slowly becoming a specialized occupation, but other stages in marketing remained at the rudimentary levels achieved by mercantile capitalists. The later period, from 1840 to 1890, in the eastern section of the United States witnessed a strong specialization movement in both wholesaling and retailing, with individual firms concentrating on the marketing of unified merchandise lines, such as hardware, groceries, dry goods, shoes, and tobacco. During this period department stores and chain stores were established, although the years of greatest growth for these types of retail institutions came between 1890 and 1930.

Specializing Business Agents. During the same period, from 1840 to 1890, there was a further significant development of specializing business agents and auxiliaries such as selling agents (distributing part or all of the output of a producer in return for a fee), purchasing agents (buying supplies and raw materials for factories and railroads), legal agents, general auditors (developing into public accountants), advertising agents (specializing in creating and placing business publicity for a commission fee), and several types of financial agents. The growth in importance of this type of business auxiliary represented a new development in economic organization. Described in the simplest terms, this development was the result of a further splitting up of a multitude of diversified activities previously carried on by the sedentary merchant as the classic type of mercantile capitalist who maintained an interest in every type of business activity and unified them all under his single control. The great change brought to business methods and

organization by the Industrial Revolution was clearly this transfer of business management from the unified control of diversified activities to intense concentration upon specialized tasks in production and in distribution.

FINANCIAL CAPITALISM

The system of specialization induced by the application of power techniques to tasks of production has not endured unchanged to the present day. Business historians, examining the developing web of American economic organization, have been able to mark not only the rise of the period we call the "Industrial Revolution," but also its decline toward the end of the nineteenth century, and have been able clearly to distinguish a later period which has been called the "era of financial capitalism." The reasons for this change in economic organization in the later part of the nineteenth century are rather complex.

The Financial Capitalist. The significant feature of the era of financial capitalism was the rise to positions of economic power of a new group of financial capitalists. In part this development can be traced to the intense need to draw into giant business large supplies of money, chiefly required to finance rapid expansion. The main sources of supply of these funds were, of course, the new group of specialists in banking. At first this included only the investment bankers,[1] and later they were joined by those commercial bankers who developed strong ties with the investment-banking houses. The extension of funds to industry naturally induced in bankers a desire to exercise some control over the management of their investments and the funds for which they assumed some responsibility. As a further cause, it may be observed that a number of investment bankers were not well satisfied with the intense competition developed by specialized industrial producers. As industrial firms grew larger, the forces of competition developed to such a point that only the strongest units were able to maintain their economic positions. Investment bankers became seriously concerned about the security of the large funds which had been placed in the hands of industrialists. Those bankers directly concerned with supervising the flow of funds into industry gradually came to the belief that the specialization trend had been overdone, and that economies to be secured from a

[1] See Chap. 22.

shrewd coordination of production and distribution had been, in many cases, overlooked.

The New Diversification in Industry. The point of view of the financial capitalist slowly began to influence business development in a movement which sharply contrasted with the specializing tendency of the first half of the nineteenth century. This change in organization methods involved the spreading out of industrial activities toward a new diversification of industry. It also involved a tendency on the part of industrial firms to extend their control of sources of raw-material supply and transportation facilities required to bring raw materials to factories. In some cases, it involved the combination of competing business units in an effort to reduce some of the more destructive aspects of competition.

Examples from Industry. Events in the history of the iron and steel industry illustrate this change. Beginning with a concentration on the smelting of iron ore, under the influence of financial capitalism manufacturers extended their control back to ownership of iron-ore supplies and mining activities as well as of transportation facilities required to deliver the ore to the furnaces. In some cases, control was extended to coal used as fuel in the manufacturing process. Operations were extended forward in the industry's panorama to work on finished parts, such as rails, pipe, wire, and structural pieces.

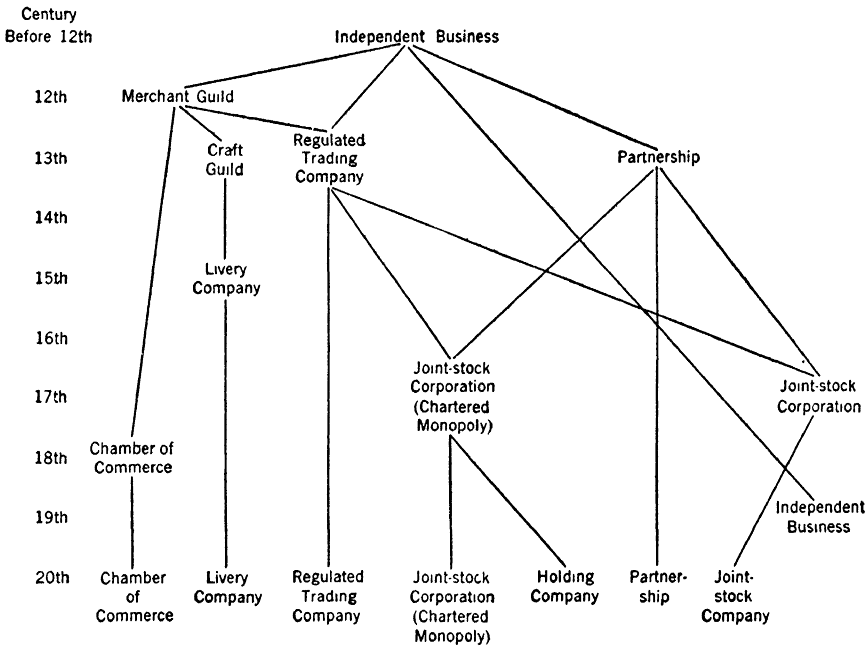
In the meat-packing industry, from a first concentration of operations on slaughtering, the packers extended their control. They established stockyards at central shipping points. They operated refrigeration cars. They enlarged their manufacturing operations to include the preparation and sale of such by-products as oleomargarine, hides and leather, fertilizers, and soap. In expanding their marketing activities, they added the sale of canned goods, eggs, butter, and poultry.

Significance of Financial Control. It must be remarked that this control by financial capitalists (1) was not always in the interests of the most efficient operation of industry, and (2) by its control of competition in some cases led to monopoly power which was clearly not in the interests of the nation as a whole. Toward the latter part of the nineteenth century, some of the more oppressive monopolizing tendencies which appeared as a result of the influence of financial control aroused bitter public opposition. Eventually the opposition made itself felt through legislation designed to break

down and prevent monopolies and to attempt to uphold a level of competition sufficient to protect consumers.

Certain important social effects of this extension of financial control should be pointed out. The first is the growth of large

CHART 6. BUSINESS ORGANIZATION — TYPES OF BUSINESS



Business organizations of the twentieth century represent an inheritance from centuries of development and the line of relationship can be traced with little deviation. The partnership agreement, still common in small enterprise and even in a few large organizations, was developing as early as the thirteenth century. The modern chamber of commerce and the trade association trace a historical connection with the merchant guilds of the twelfth century. The regulated trading company, introduced before the fourteenth century, still exists in substance in the shape of organized commodity and stock exchanges, and in the Corporation of Lloyd's (insurance underwriters). The joint-stock company, operating as a chartered monopoly as early as the fifteenth century, is the prototype of the modern public-utility enterprise. Not only have such forms as these continued for centuries without material change; there can also be observed lines of influence extending from one type of organization to another, as indicated in the chart.

SOURCE: Adapted from N. S. B. GRAS, *Casebook in American Business History*, F. S. Crofts & Co., New York, 1939, p. 136.

fortunes. The period of industrial specialization was one in which some of the great American family fortunes were founded (in such industries as foreign trade, textiles, and real estate); but the accumulation of wealth was hastened by the transition to financial

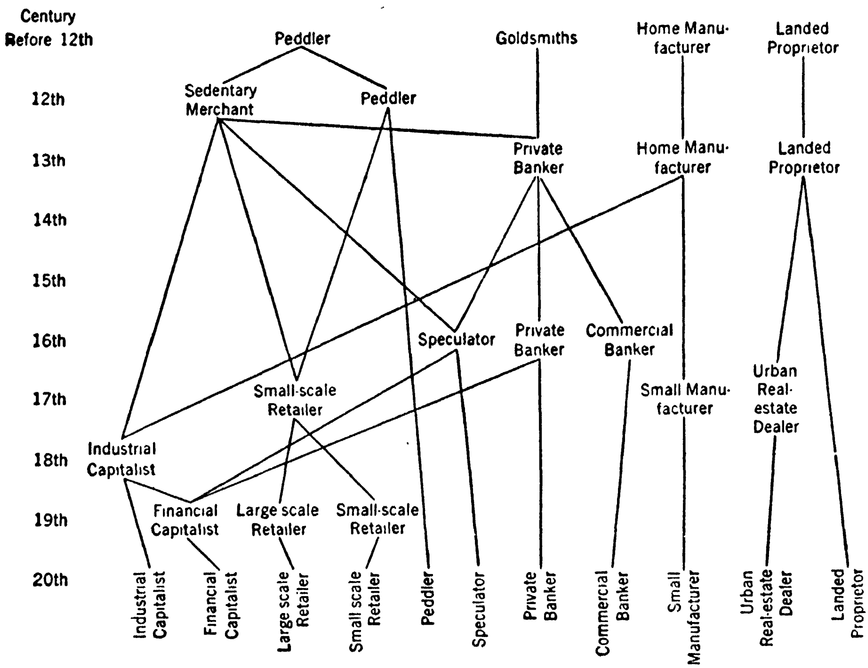
capitalism wherein the combination of almost unlimited opportunity and a high rate of profit helped to create many of the most imposing accumulations of wealth in the history of the world. Both good and bad results can be traced to this era. Great fortunes in positions of power made possible a concentration of controlling interests which, carelessly employed, contributed to the destruction of a healthy level of business competition and of a desirable group of stabilizing smaller enterprises. On the other hand, great fortunes maintained that constant stream of investment money pouring into American industry, without which the astounding growth of the later nineteenth and earlier twentieth centuries would not have been possible.

The Growth of Large Units. In the era of financial capitalism were established the foundations of most of the contemporary giant business corporations. Combination of functions often made possible an increase in operating efficiency and in the financial strength necessary to withstand the strain of depressions. But it introduced, as well, the phenomenon of armies of dependent workers in factories and offices. The retreat from self-sufficiency continued. The fluctuations of prosperity and depression became a normal business experience. The grinding shocks of the years of economic inactivity bore more heavily on the masses of workers. The concentration of workers in large cities deepened the social shock of depression and removed larger sections of the population from more healthful surroundings. The strands of the modern economic web were spun in the era of mercantile capitalism; the web was enlarged in the era of industrial capitalism; it was brought near completion in the era of financial capitalism.

The Position of Management. The period of financial capitalism introduced a significant change in the position of business management. The petty artisan, the sedentary merchant, and the industrial capitalist were the personal administrators of their enterprises. When control of the largest business enterprises came under the influence of the great investment bankers, for the first time in the history of capitalism there appeared a separation of ownership and management. Administration of big business was placed in the hands of a group of salaried managers who often had little or no ownership interests in the concerns whose affairs they directed. Frequently the policies of big business were dictated by minority interests with concentrated power.

To the business organization of the industrial capitalist, financial capitalism contributed a more rational economic structure with a smoothing of destructive competition, a tremendous flow of funds from accumulated savings, integration of business functions, diversification of interests and risks, scientific management, and efficient routines of administration and control. Against these contribu-

CHART 7. BUSINESS ORGANIZATION — TYPES OF BUSINESS MEN



As with types of business organization, so with types of business men, the basic forms appeared early in economic history. The peddler, home artisan, and landed proprietor may be found today operating as they did before the twelfth century. From the sedentary merchant the line of historic relationship can be traced to modern retailers and wholesalers (not indicated on the chart), while the development from the pre-twelfth-century goldsmith to twentieth-century commercial and investment banker is one of slowly adapting forms.

SOURCE: N. S. B. GRAS, *Casebook in American Business History*, F. S. Crofts & Co., New York, 1939, p. 136.

tions must be weighed the evils which flowed from concentration of power and control, from the drive toward combination in business which often overreached itself and created no new efficiency, from minority influence, and from monopoly dictation of prices and selling practices.

The Place of Small Units. Under the structure of big business,

it must be remembered, small units continued to operate. Large enterprises tended to develop where mass production offered economies. There were many industries however, of which garment manufacturing is typical, where the nature of the manufacturing operation held out no promise of reducing processing costs through concentrating production in large plants. In these industries, small concerns remained the common productive unit. In retailing, too, although chains and giant department stores extended their share of total business in the first three decades of the twentieth century, small stores held the lion's share of trade. And wherever small units were formed, there competition was unrestricted, there price-cutting was prevalent, and there, with a poorly developed science of management, inefficient methods were perpetuated and the rate of business mortality was high.

NATIONAL CAPITALISM

A review of the historical background of modern business cannot be concluded without some discussion of recent trends in business and general economic organization. The United States is now in what appears to be a mature stage of financial capitalism. In many areas industry has reacted against overspecialization and destructive competition. Marketing has had an opportunity to benefit from a similar rationalization process, and general business methods in the field of distribution have been materially improved by the practices of the larger department- and chain-store enterprises.

This progress has not been without its difficulties. Periodic fluctuations in economic activity (commonly described as the "business cycle") have continued to subject society to strain. And although living standards have advanced beyond levels attained in any country at any time, large sections of the population have remained without adequate housing facilities while their spending for food has been kept below levels described by health authorities as requisite for the preservation of general health. Agriculture suffered from chronic depression after 1921. In 1930 began a depression which eventually proved to be the longest and most severe in economic history.

Frictions within the Economy. As a result of these difficulties, points of friction have been discovered within the organism of American society. Dissatisfaction with the working of sections of

business even in prosperous years and with general social and economic conditions in depressed periods has induced the beginning of change in business organization. The movement, which began at the end of the nineteenth century and was markedly speeded up after 1930, has been described as a drift toward "national capitalism." The term is used to designate the transfer of control from private business men to administrative bodies of the Federal government.

To some extent this may be regarded as a natural response to the development of the intricate web of interdependency which has evolved in the economic system. The society has grown powerful; but it has threatened to fly apart. It holds tremendous productive powers; but it subjects men to periodic strain which has in many cases become intolerable.

Evidence of Current Changes. Evidence of the change may be found at several points within the economic organization. There is (1) an apparent movement toward governmental control of the operations of financial capitalists. There is (2) an expansion of the taxing authority and, with the growing activities of government, a need simultaneously to raise tax rates and extend tax bases. There is (3) a disposition to supplement and replace private and local charity with centralized Federal provision for relief of the derelicts of the economic system. There is (4) evidence that the central government itself is entering production as an active competitor. There is (5) an obvious speeding up in the rate of social reform and government ownership of heretofore private business.

We are still in such an early stage of this movement that a clear appraisal of future trends may not be made. There is reason to believe, however, that the disposition to transfer power from business to government will continue for some time, despite temporary setbacks. Many critics of financial capitalism have argued that such a tendency is the only way to preserve the general benefits of the economic organization we have developed. In a society which has recorded a history of ceaseless change, there is certainly little reason to believe that what now exists will continue indefinitely without adaptation. The health of business has been precisely in the ability of business men to adapt to change. The only risk is that a process of orderly *evolution*, to which accommodation may be made, may be hurried into *revolution*, which destroys more than it creates and abandons what has proved sound.

DEFINITIONS

Common law. The historic unwritten system of laws, binding because of immemorial usage and universal reception. Generally distinguished from *statute law*, which is the expression of legislatures.

Financial capitalism. Term applied to a period (late nineteenth and early twentieth centuries in the United States) during which substantial control over the policies of large industrial units came into the hands of large investors, money middlemen, and bankers both commercial and investment.

Guild. Association of petty merchants or artisans, arising in medieval England as early as eleventh century, controlling trade practices, standards, apprentice systems, etc.

Industrial capitalism. Term applied to period (mid-eighteenth to mid-nineteenth centuries) when specialized business men split up the functions of the sedentary merchant. Development stemming from the Industrial Revolution.

Industrial Revolution. Term applied to period in which men discovered how to use mechanical power in production and invented power-driven machines. Made possible the transfer of manufacturing operations from home workshops to large factories.

Law merchant. Common law based on trade customs enforced in medieval times by informal juries of traveling merchants. May be compared with modern arbitration of business disputes leading to settlement outside of court.

Mercantile capitalism. Term applied to system (roughly 1300–1800) in which merchants with varied business interests assumed control over petty artisans and peddlers. Period in which were introduced many modern business-administration techniques.

Mercantilism. National economic system (roughly mid-sixteenth to mid-nineteenth centuries in England) which emphasized business, particularly manufacturing, sought to establish a favorable balance of trade (excess of exports over imports); and maintained colonies as suppliers of raw materials and purchasers of finished goods.

Monopoly. Effective control by one producer of the total supply of any commodity or service in a given market. As freely used, enough control over supply to enable producer to raise and maintain price above that which might be reached under conditions of free competition.

National capitalism. Term applied to recent tendency toward centralized governmental control over the flow and use of capital. This is often combined with a movement toward government operation in sectors of business, as governmental production of electricity in competition with private business.

Sedentary merchant. Often referred to as a merchant capitalist. The typical business man in the period of mercantile capitalism, acting as the administrator of diversified business enterprises, remaining at home while agents supervised the scattered affairs of the business. The sedentary merchant was the first large-scale capitalist and administrator.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What important influences have shaped the growth of modern economic organization?
2. What is meant by a "hunting economy"?
3. What is meant by a "village economy"?
4. In what sense was the craftsman specialist a founder of modern business organization?
5. How did the petty capitalists aid in the growth of large cities?
6. What were the guilds? How were they organized?
7. Discuss the chief activities of sedentary merchants.
8. What was a joint-stock company?
9. What was the Industrial Revolution?
10. What is meant by the "factory system"?
11. How were developments in transportation related to techniques of production and distribution?
12. What is meant by "financial capitalism"?
13. How did financial capitalists influence business development?
14. What were the social effects of the control of business by financial capitalists?
15. What relationships arose between large business units, small business units, monopoly, and competition?
16. What forces are leading our economy toward national capitalism?

B

1. What forces induced the progressive changes from hunting economy to nomadic, and, later, to village economy?
2. What led to the breakdown (*a*) of individual self-sufficiency, (*b*) of family self-sufficiency, and (*c*) of village self-sufficiency?
3. Why did the growth of the private-business economy force the breakdown of the feudal system?
4. What led to the organization of merchant guilds? What was their influence on business organization? To what modern business institutions might they be compared?
5. What influences were responsible for the transition from petty capitalism to mercantile capitalism?
6. Compare the activities of a sedentary merchant, such as John Hancock, with those of a modern capitalist.
7. Trace the factors responsible for the rise and decline of mercantilism as a national policy.
8. Why did business diversification give way to specialization following the Industrial Revolution?
9. Why did violent fluctuations in economic activity (business cycles) follow the Industrial Revolution? Why was the early capitalist period relatively free from such fluctuations?
10. Trace the important steps in the transfer of economic and social control from the individual to the state.

11. Are we as a nation richer or poorer as a result of the disappearance of self-sufficiency? Why?
12. The British economist, Adam Smith, observed in his *Wealth of Nations* that every individual, in pursuing his own gain, is "led by an invisible hand" to promote the public welfare. Do you agree? Does a system of individual competition for private gain serve the public interest? How?
13. What are the social gains and losses of mass production?
14. "The formation of those giant financial combinations we call trusts was inevitable." Do you agree?
15. In what ways is modern industrial organization more complex than the industrial organization of 1776?
16. With which of these statements do you agree? (*a*) The machine has enlarged the market. (*b*) Growing markets have made possible the machine.

C

1. Write a report on the economic interdependency of your home community. Use specific illustrations.
2. Describe your relation to the economy in which you live. To what extent are you self-sufficient? List the commodities and services you could supply if you had to.
3. In the business world of your home community, can you find any examples of petty capitalism, of mercantile capitalism, of industrial capitalism, of financial capitalism, of national capitalism? Cite examples and describe their operation.
4. Write a report on the economic history of a large city, giving particular attention to the factors influencing its growth.

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CHAPTER 3

THE FOUNDATIONS OF THE PRIVATE-ENTERPRISE SYSTEM

The economic organization of American society is commonly termed a "private-enterprise system." Several meanings may be attached to the phrase. It may represent the idea referred to in the words "rugged individualism." To some there is no distinction between a private-enterprise system and a system of "laissez-faire" (leave business alone). Some say that "private enterprise" and "capitalism" are synonymous. But there are many who argue that a private-enterprise system is not adequately described in these phrases and that it actually means something very different. It is important, therefore, to outline the essential foundations of the private-enterprise system which has grown up in the United States. Only with a clear understanding of these foundations will it be possible to grasp the relation between business and the rest of our society and to outline the areas of freedom and control within which business enterprise functions.

THE FUNDAMENTAL ECONOMIC PROCESSES

We have already observed that in any form of economic life there are three basic jobs which must be performed. No individual, no group, and no society can maintain existence without their performance. These jobs are (1) determining what to produce, (2) determining how to produce, and (3) determining how to distribute what has been produced. The history of human society records a variety of ways in which decisions about these vital tasks have been reached and a variety of types of economic organization which have been devised to perform these tasks. Men may produce by themselves, with home-manufactured tools, and consume all they produce. Or, at the other extreme, they may devise the complicated web of production and distribution existing in modern industrial nations in which goods are rarely consumed by those who produce them. The coal miner cannot live by consuming coal. The automobile worker cannot live on his product. Even the

farmer, whom many regard as self-sufficient, needs manufactured goods. In this economy of specialization it has been necessary to devise means whereby each specialist may exchange his produce for the goods produced by other specialists.

The Social Interest. It is plain that our society as a whole has a direct concern with the performance of the vital economic tasks, the making of the essential decisions, and the technique whereby the exchange of specialized surpluses takes place. For if we grant that full employment of labor and resources, high living standards, personal and economic freedom, and security are desirable for the good health of the society, then the inhabitants of the society must be concerned about the performance of the vital economic tasks. The social ends and the economic techniques are related. The citizen is a worker. And since, as a citizen, man expresses his desires through the agencies of government, we find an inescapable bond between government and business.

One of the fundamental questions throughout economic history has been this relation of government and business. It is a question to which a later section of this book will return for more detailed discussion. At present let it be said merely that the relation is significant and that changes in the relation — as between outright government ownership of business and a policy of government hands off business — determine at any time the type of economic system within which the fundamental decisions are made.

It is difficult to conceive of business functioning without some governmental activity and responsibility. Yet there is a popular impression that society must choose between outright government ownership and control on one side and absolute individual freedom on the other. The choice is really one of the degree of governmental control and the degree of private control. Probably there has never been an economic system without some measure of government control of private business. It is equally true that there has never been an economic system which did not grant some range of free action to private individuals.

Free Action and Control. The economic system which has developed in the United States represents a combination of free action by private individuals and control by the government. It is a combination in which the essential freedoms of private enterprise are protected, provided that economic activity is held within the framework laid out by government in behalf of society as a

whole. In this sense, business might be described as a game in which the players (business men and business enterprises) are bound by recognized rules (systems of law and customary practice). The government serves as umpire, prepared to prohibit infractions of the rules and possessed of penalizing powers. Because this combination of individual and government activity lays stress upon the freedoms of private individuals, we call it a "private-enterprise system." It is a system which relies on individual judgment to make decisions about what to produce, how to produce, and how to distribute what has been produced.

PRIVATE RIGHTS IN PRIVATE ENTERPRISE

Let us begin by saying that the following freedoms (with certain modifications to be noted) are reserved by law for private individuals and enterprises in our economic system:

1. The right to determine economic activity within the framework of the law.
2. The right to private ownership of property.
3. The right to enter and withdraw from business.
4. The right to make individual decisions in regard to the production and distribution of goods and services.
5. The right to express these individual decisions in contracts.
6. The right to secure enforcement of contracts.
7. The right to compete in any way within the framework of the law.

And now let us attempt to describe these freedoms, to indicate their limitations and the reasons for the limitations, to point out how they are essential to the maintenance of a private-enterprise system, and to expose the role of government in the American economic system.

1. *The Right to Determine Economic Activity.* The initial motive power in a private-enterprise system is supplied by decisions of private individuals. A man has a right to build a factory, or to decide not to build a factory; the choice is his own. A man has a right to lend his money or not; the choice is his own. A man has a right to dispose of his labor power or his services, or not; the choice is his own. Consumers have a right to spend money as they desire, to buy some things and to refuse to buy others; the choice is

their own. It is true that the general principle guiding and directing these decisions is the hope or the expectation of making a profit or securing a satisfactory monetary reward. Profit is the mainspring. But it is the individual's appraisal of the possibility of securing a profit or of earning a satisfactory wage which sets every potential economic act in motion.

Objection may be raised that the government dictates to business men maximum hours of employment for their workers and minimum-wage levels; that it lays down rules governing the use of safety devices around dangerous machines; that it outlaws certain business tactics, such as monopolistic practices or untruthful advertising. But it should be noted that these are controls which govern the *conditions* under which economic activity may be carried on. They do not affect the basic decisions to produce or not to produce, to invest or not to invest, to work or not to work, to buy or not to buy. The decisions to enter upon certain types of business action are taken with knowledge of the conditions under which they must be carried on. In only a few areas of business, such as the operation of a railroad or the production and sale of electricity (businesses loosely termed "public utilities") does government control the conditions of doing business and regulate the right to enter business. Almost universally throughout the great range of business the right to determine business activity is held by and safeguarded for the individual.

2. *The Right to Private Ownership of Property.* The right to determine economic activity is a real right only if men are free to act with the hope of adding to their possessions. We accept as an essential of human nature the belief that no one takes as good care of a piece of property or works as hard to protect and increase it as does its owner. We do not doubt that the farmer who owns his own farm will care for the equipment while the tenant may be careless. The workingman usually takes better care of his own tools than of tools supplied by his employer. The store owner who acts as manager of his own enterprise is expected to be a more painstaking superintendent of business details than is the hired manager. In the sense of these examples we recognize that private property provides an incentive for greater care, for sharpened interest, and for the stimulation of initiative and ingenuity.

It should be recognized that a private-enterprise system is not

and cannot be a system of complete individual liberty. The preservation of property rights on any basis other than that of military strength demands legal safeguards. These legal safeguards in turn restrict the freedom of action of others. One's property is not safe if the law permits others to enter it and use it. By its very nature, then, the right to hold private property restricts the liberty of all members of the society. Extending throughout our economy is a mutual limitation of liberty in the sense that no one may use his freedom to injure another. In this way, enterprise has been permitted to grow largely as the abilities and opportunities of managers have made it possible.

This erection of property rights above personal liberties might, if uncontrolled, lead to either anarchy or despotism. Anarchy might be expected if property rights were not protected from encroachment. In this condition, no one could hold his possessions safe. The activating power of property would be dissipated by the fear that what had been with so much difficulty acquired might be lost without warning. On the other hand, despotism might be anticipated if in the effort to protect property rights we should permit property to be the sole determinant of power and property rights universally to be valued above human rights.

The control factor which intervenes to prevent both anarchy and despotism is the fact that in the free enterprise system the right to private ownership of property is not confined to a few. The right is universal. It extends to small properties, as well as large. It extends to all types of property, not merely to land, machines, and buildings, but also to ideas and to labor power. And since the owners of every type of private property may actively, within the frame of the law, use it and attempt to increase it, there results a kind of controlled self-interest. Traditionally, that control has been competition. Recently, competition has been supplemented and reinforced by governmental controls.

The theory underlying our reliance on competition as a control is usually described in this way. Owners of property engage in business for a profit. The best way to make a profit is to offer to sell to others (customers) what they want to buy. Under competitive conditions, there will usually be several business men offering to sell similar merchandise. They will compete with each other for customer patronage. In the effort to make a sale, one may improve his product, another may lower his price, a third

may contrive an ingenious invention which makes his product easier to use.

Customers have the right to spend their money as they see fit. They will buy the best product or the cheapest product. Among business men, those who compete effectively prosper; those who do not compete effectively sooner or later are forced out of business. All these purchases and sales are made by economically free individuals. One has no power over another. Business transactions are, therefore, strictly private and not the public's concern. The parties engaged in the transactions are the best judges of their own interests. A major policing function delegated to the state is to prevent the erection of monopolies which, by the nature of their freedom from competition, make their transactions one-sided. The fact that a business man is trying to increase his private property at the expense of others and that his interests are opposed to those of all his customers will not endanger the consuming public because competing business men will force him to offer his customers the best bargain he can devise.

Now it is not difficult to see that although this control of the free ownership of private property by the forces of competition is a generally satisfactory type of control, it rests on several assumptions. These assumptions include the following: (1) that all participants in the business process are equally strong, equally alert, equally shrewd; (2) that all participants are in a position to trade or refuse to trade, as they interpret their own best interests; (3) that there is real equality of opportunity.

The difficulties and the frictions which have arisen in connection with the acceptance of competition as a control can be traced to the fact that these assumptions are not always sound. The small enterprise is not at all the equal of the large enterprise in terms of economic strength. Consumers purchasing merchandise in retail stores usually are not so alert or so shrewd as experienced manufacturers. Individual workingmen are seldom in a position to refuse to accept employment under terms offered by potential employers. Nor can it be argued that opportunity is equal as between the child of wealthy parents and the slum child. The weaker economic units cannot withstand the strains of periods of depression which are weathered by the stronger units. It is even suggested that the major force of competition itself has been diminishing in recent years.

Time and space do not permit a complete analysis of the validity of these basic assumptions. We shall return to some of the questions in the last section of this volume in the discussion of business and government relationships. Some of the assumptions the reader can evaluate in terms of his own experience. Solely as a temporary working basis, the following brief conclusion may suffice.

Competition serves as a fairly effective control over the abuse of private-property rights in most areas of business. While any critic of things as they are may launch a destructive attack on the adequacy of competitive controls from the viewpoint of things as they should be, he cannot overlook the contributions of the private-property device when regarded from the viewpoint of things as they might be. The enterprise system founded on the right to private ownership of property has worked well enough to suggest that improvements can be discovered sooner through further experimentation with the enterprise system than through its abandonment. Blueprints of what might replace private property as an economic mainspring seem on the whole less attractive than that which we can hope to secure through a better understanding of the private-property device and its competitive control.

3. *The Right to Enter and Withdraw from Business.* The foregoing discussion of the relation of property ownership and competition to the well-being of the enterprise system makes it clear that the right to enter and withdraw from business is vital to both the free use of property and to effective competition. If a man cannot readily initiate a business enterprise, then he may be virtually barred from attempting to increase his property holdings. If he cannot readily withdraw from business, then he may be unable to protect his property and conserve its value. If his mobility is impeded, then to that extent competition is impeded. If competition is impeded, its protection to consumers as a control of predatory business interests is weakened.

It must be conceded, however, that the right to engage in business is a grant of power so great as to be of significance to society as a whole. It permits an individual to become part of the productive economy. It enters his decisions about what to produce, how to produce, and how to distribute as part of the great schedule of decisions made by millions of other property holders. It gives him some control over social welfare. For these reasons, while

we admit that this right is essential to a free-enterprise system, it cannot be permitted to run riot because it may endanger the system.

We must admit, that is, that there may be a significant difference between the *legal* right to enter business (about which there can be little room for argument) and the *social* right. For the right to enter business carries with it the right to hire the capital and the labor of others and to use them under conditions which may or may not be of benefit to society. Although this grant of power has long been understood, for many years there was little disposition to be greatly concerned about it. Competition was accepted as an effective control to protect the public interest. There is now a growing tendency to question whether competition alone is a sufficient control.

Some areas of business enterprise, indeed, are set aside as protected segments of the economy. In these areas, the right to enter and withdraw from business is not granted freely to all comers. Certain types of business enterprise — the operation of an electric light and power plant is a good example — are termed "public utilities." Entrance into these fields is closely controlled, under government supervision. No one may enter business in these restricted areas without official sanction, and, once in, no one may withdraw from business without official approval. Thus a railroad may not, without sanction of the controlling government administrative agency, abandon service on a branch line upon which individuals and business concerns depend, *even when that branch may be operating at a loss.* The rights of unrestricted entrance and exit in these situations are closely controlled.

There are other sections of the business world where entrance and exit are controlled not by governmental power but by economic forces. Some types of business enterprise, of which the manufacture of automobiles by mass-production methods is a good example, naturally require tremendous investments of capital. Concerns in the business may be earning large profits, but business men cannot enter at random to compete with existing firms because these businesses can be engaged in only on a very large scale. Inasmuch as few individual business men possess or can secure control over sufficiently large sums of money, they may be barred from entering these businesses as effectively as if there were a government edict against it.

It may be concluded from this discussion that the right to enter and withdraw from business is essential to the private-enterprise system. At the same time, we recognize that in some sections of the business world, because of the nature of the enterprise, these rights must be curtailed. We also recognize that in other sections of the business world, because of the necessary size of the efficient business units, the right to enter is limited to those few who can command the requisite funds.

4. *The Right to Make Individual Decisions about Production and Distribution.* Having entered upon the direction of a business enterprise the business man finds that the task of management consists largely in framing a series of isolated decisions regarding the production and distribution of goods and in attempting to coordinate the decisions into a consistent and unified policy. It is true that some of the decisions a business man makes are partially dictated or shaped by law or established public policy. Wages of labor, hours of employment, and factory working conditions fall into this category. The great range of management decisions, however, are made with more or less freedom by business men trying to operate in such a way as to protect and increase profits. It may be added that unless the majority of management decisions are made in this way the private-enterprise system will lose much of its vitality. In a very real sense the system would no longer be one of *private enterprise.*

It is impossible to give too much emphasis to the complexity of this right to make individual decisions. In a competitive economy the business man must reckon not only with the effect of his decisions on the costs of carrying on the business, on profits, on his customers, and on his employees. He must also be concerned about the effect of his decisions on his competitors and the decisions they may make in retaliation. And he must reckon with the unstable, constantly changing conditions of the business world with its rapid fluctuations in economic activity, its changing price levels, and its flow of inventions. The wonder is not that business men make mistakes; it is that they do not make more of them.

For these decisions must be made. They cannot be avoided. General business activity is expanding. Orders turned in by the sales force are up 50 per cent. Plant operation is nearing capacity. A second shift of workers is added; a third is put on, and the machines roll ceaselessly 24 hours every day. Still the demand

for the product presses on factory potential. Shall the orders be turned down? A new plant will cost $300,000 to build and equip. Where can the money be found? If the plant is built, the machines installed, the labor force hired and trained, what will be done if demand slackens? What will be done if the plant is not needed, although the building must be paid for, and insurance and tax charges must be met? The demand may slacken. There is no guarantee it will not fall off. The prosperity period may end; every period of general prosperity in American history has closed in panic and depression. And no one can predict when that end will come. Or, even in general prosperity, a new device, a new alloy or plastic may cut into sales, leaving the plant idle, the machines stilled, the workers out of jobs. Should the increased orders be turned down? Should new business be refused? What are the comparative costs, profits, and risks of refusing to build the new factory as against going ahead with the expansion with the possibility that it will never be used?

Or — we manufacture men's shoes. For 20 years we have sold shoes to independent men's shoe stores in every important city and town in the country. Recently competition has grown more intense: chains of shoe stores, centrally managed, have begun to increase their sales, drawing business from the independent outlets that have been our best customers. Some of the independents are not good merchants. Their stocks of shoes are not complete. Often their customers find them out of the new styles featured in *Esquire*. Their advertising is weak, their window displays unattractive, their prices high. The sales manager proposes that we open a chain of factory-operated retail shoe stores in the principal cities. In this way we can secure more aggressive retail representation, increase sales of shoes, make more profits. Will this result follow? Do we understand the problems of managing retail stores? How much money will be required? What will be the effect on our other dealers? Will they resent factory competition? Will they fear that our policy will spread from city to city, eventually to displace them all, so that their best immediate move is to drop our line of shoes at once? And if we take this step, will there ever be a chance to retreat? Will there be an opportunity to recapture dealer good will sacrificed in this way?

These are individual decisions of business in the private-enterprise system. They are decisions which cannot be avoided, which

call for experience, skill in interpretation, shrewdness in planning, courage in execution.

5. *The Right to Express Individual Decisions in Contracts.* The business man looks upon a contract as an agreement for mutual exchange. In defining a contract the word "mutual" should be stressed, for an agreement without consideration, without a mutual exchange, is not a contract. It is the single most significant business instrument, in the sense that it forms the basis of that web of relationships of which the business world is formed. It serves as a major stabilizing and guaranteeing force in business. But its real relation to interlocking relations in business is suggested by point 6, below.

6. *The Right to Have Contracts Enforced.* The right to express individual decisions in contracts would not make the contract the significant business instrument it has become if contracts were not enforced. A business man might, conceivably, enter into agreements with his close associates even if the power to enforce the agreements were not present, relying on his personal knowledge of their character and integrity. He would not enter into such agreements with strangers, lacking the power to compel their performance of that which they have contracted to do. Without the instrument of the enforceable contract business could not extend beyond local relationships. No business man could deal with other business men at a distance. Giant industry and mass marketing would be impossible. The private-enterprise system could not function. The enforceable contract may be regarded, therefore, as the technical means whereby private decisions in the private-enterprise system are expressed and carried into action.

The role of government in erecting the legal framework within which business operates is clearly demonstrated by its powers with respect to the enforcement of contractual agreements. Governments provide the enforcing agency, the courts, in which specific performance of contractual agreements may be enforced or damages may be exacted for failure to fulfill the agreements. Government makes provision for a variety of situations in which enforceable contracts may not be drawn up. And, through the courts as the enforcers of contracts, government is an important agency in the interpretation of contract terms. In this sense, the legal framework within which the private-enterprise system operates is in reality an integral part of the contract.

The major basis for governmental reasoning with respect to contracts has been that the contracting parties must be acting independently and with full understanding of the meaning of the agreement. The contract, that is, must serve as an instrument for extending and facilitating free competition, not as a means of throttling competition. This attitude is in keeping with the traditional role of government in a free-enterprise system. Thus, contracts made under compulsion or threat, contracts made by children or by those not competent to bargain, and contracts in restraint of trade are void and will not be enforced. Further, no one may contract to do anything in violation of existing laws.

The state not only enforces the terms of contracts; it limits the use of the device. Within these limits, because of the power to secure enforcement, the contract has become a useful and significant business instrument.

7. *The Right to Compete.* Competition in business may be defined as "rivalry for income by giving more than one's rivals give or by making the public think so, or by making them at least act as if they thought so, to the extent of buying one's goods in preference to those of one's rivals." Competition between business men would appear, on its surface, therefore, to be the perfect expression of the private-enterprise system. It would appear to be the force which in the private-enterprise system lets one business man come to the top, while another sinks to the bottom, solely as a result of the ability of the first to offer customers what they want, as against the failure of the second to interpret public desire accurately. Free competition has been mentioned a number of times as a controlling factor in the private-enterprise system, stimulating manufacturers to improve their products, stimulating retailers to operate their stores more efficiently and to gauge public demand more accurately, and enabling consumers to get the greatest possible return for each dollar spent.

This theoretical view of competition must be modified in some respects. In the first place, government enters as a control of competitive devices. This appears to be desirable because if business men were allowed to compete in any way they wanted, certain practices might result which most people would regard as socially undesirable. During the formation of some of the largest industrial concerns in the latter part of the nineteenth century, for example, it was not unknown for a giant organization

deliberately to lower its price in one city in order to drive out of business small competitors. After the local enterprise had been forced to the wall, the giant concern would again raise its price to the level maintained before price cutting was introduced. In this example, the consumers in that city benefited from price cutting only temporarily. At the end of the price-cutting period, no competition was left and, in the long run, consumers were forced to pay more for merchandise than they would have paid had the practice not been introduced. There appears to be, that is, legitimate and illegitimate competition, and one of the duties assumed by the government in the private-enterprise system is that of distinguishing between these two types of competition. Among the types of illegal competition which business men and government have recognized may be listed local discriminatory price cutting, false statements, bribery, intimidation, and a number of similar tactics.

The elimination of these types of competition does not remove from business the right to compete fairly. In fact, government, looking upon another aspect of the problem of competition in business, has enacted a series of antitrust laws designed to force business men to compete. Legislation of this type was passed in the attempt to prevent business men and business enterprises from avoiding competition through agreements not to compete. This action indicates the interest of society in the maintenance of competition on a fair level.

We have recognized this right despite the fact that competition is the source of many social losses. These losses occur, for example, when, because of competition, the less efficient producers in an industry are forced into bankruptcy because the more efficient producers secure all the sales. In the same way every year thousands of retail enterprises are forced out of business because more efficient enterprises are able to sell the same merchandise for less money or in other ways to attract most of consumer purchasing power. In accepting competition as an important factor in private enterprise we recognize these losses and evaluate them as less important than the gains secured to society as a whole.

SOURCES OF THE PRIVATE-ENTERPRISE SYSTEM

If we may summarize the discussion to this point by agreeing to describe a private-enterprise system as a type of economic

organization wherein the prime mover is individual judgment making decisions with regard to production and distribution in a free market, we are in a position to begin consideration of the next question: What have been the sources of the private-enterprise system in the United States? What forces in this New World have shaped the system we have inherited? As with so many questions of this type no simple explanation can be offered. A number of conditioning factors have been influential, among which may be listed (1) inheritance of the customs and institutions of self-reliant types; (2) the physical conformation and the natural wealth of the North American continent; (3) the governmental framework established by the founding fathers and perpetuated in the Constitution; and (4) the continuing philosophy of individual freedom.

Social and Institutional Background. The early system of trade in English villages and the mercantilist national policy favored by the class of sedentary merchants clearly emphasized individual initiative in business. It is important to remember that custom precedes law, and that custom shapes law. The principles of individual economic freedom were worked out by risk-taking, experimenting business men before a legal framework was erected for business. Those principles of free action were established and renewed every time a business decision was made, until they became the root and fiber of universal thought so that freedom to make, to buy, to sell, to set a price, to offer and refuse, to enter and withdraw from business, and to do all this on the basis of individual responsibility and for individual gain were as commonplace and unquestioned as eating and sleeping, living and dying.

This individualistic English background formed a natural frame for the ideas of the early colonists. Even more, by the very nature of their exploring spirits which gave them courage to undertake the risks of colonizing a wilderness, the settlers were contemptuous of control and were affirmants of free action. The common law and the spirit of the statutes which protected private initiative were also transferred to the colonies. They influenced the course of colonial thought. The first historic documents of national independence reflect the debt. The Virginia Bill of Rights declared: "All men are by nature equally free and independent." The Declaration of Independence proclaimed: "All men are created free and equal." The Constitution reflects an attachment

to personal freedom and a will to protect that freedom against authority. The Revolutionary War itself was to a large extent a struggle to establish the economic freedom of the colonists against the restrictions of the English mercantilist policy. Edmund Burke, one of the few Englishmen of that period who recognized the colonial position and the intellectual background for the economic struggle, said that from "six capital sources: of descent, of form of government, of religion in the northern provinces, of manners in the southern, of education, of the remoteness of situation from the first mover of government — from all these causes a fierce spirit of liberty has grown up. . . . In this character of the American, a love of freedom is the predominating feature which marks and distinguishes the whole."

The National Inheritance. Of equal importance were the physical features and the natural wealth of the North American continent. Free land, unlimited mineral resources, and a frontier on which self-reliance was the only protection were challenges to the deepest springs of individualism. The profits yielded by private initiative applied to the exploitation of natural resources reinforced the basic trust in free action. In the decades which followed it was difficult for those who had created fortunes by free enterprise to recognize that any type of control was either desirable or necessary. One of the most difficult of all concepts for the American mind to grasp has been the significance of the passing of the frontier and the influence of this factor on the growing pressure to limit the range of freedom in economic activities. When men are forced to live in crowded communities the preservation of the elemental liberties requires the control of free action. But when the country was growing up, there was room for all. The disinherited from the East, the failures and the bankrupt, could always move out to the frontier and make a fresh start. That possibility was an essential cause of the development of the private-enterprise system.

The Constitution. Attention should also be directed to the significance of the type of governmental framework erected in this country. As set down in the Constitution there was established for the United States a limited central authority entrusted to the Federal government and a maximum power reserved to local governing bodies. Further security for the individual was specifically written into the Bill of Rights, the first ten amendments

to the Constitution. Among the amendments of special importance to a free-enterprise system may be listed those guaranteeing freedom of speech and of the press; rights of assembly and petition; an equal and impartial administration of justice; and protection against unreasonable invasion of private property.

Great strength has been added to this basic philosophy of government's relation to economic life by the practice of granting judicial review of legislation. Chief Justice Marshall announced in his decision in the case of *Marbury vs. Madison*, in 1803, the power of the Supreme Court to set aside legislation which the Court held to be unconstitutional. Since then that power has been regularly exercised by state and federal courts. It has placed decisive limitations on governmental control of private-business action. And since the traditional tendency of the courts has been to conserve and protect what has been established and tested by experience, the early strength of independent action has laid down a powerful basis for its protection through the years. Certainly the power of judicial review has preserved society against the shock of sudden changes in the fundamental economic procedures. It should be added, on the other hand, that the strength of the court's position has tended, from time to time, to delay necessary legislative changes. The economic problems of free enterprise in the modern industrial system are not the problems which confronted the framers of the Constitution. A governmental framework suited to the rudimentary business organization and localized activity of 1790 is not perfectly adapted to modern problems of coast-to-coast business, great factories, extreme interdependency of individuals, and giant financial strength.

Personal Liberty. Finally, the maintenance of the idea of personal liberty as a permanent goal has been an important source of strength for the private-enterprise system. Freely and without question we have accepted the proposition that every individual has a right to carve his fortune for himself. We have accepted the proposition that government should design no more than a framework for competition. We have accepted the proposition that freedom of economic action shall precede every other social objective.

From inheritance, physical wealth, governmental framework, and a profound belief in the value of individual initiative a private enterprise system has been established and protected in this

country. The system has shaped the educational preparation of children. It has influenced the public appraisal of proposed legislation and of arguments for new social and economic relationships. To it we owe the strength of the character, the energy, and the impelling driving force of Americans as business men. To it we owe the giant growth of business enterprise, the development of the powers of invention and technical adaptation, and the broad elevation of living standards within the continental borders. But recognition of this history should blind us to neither the costs of free enterprise nor the social responsibilities which the system imposes upon those who work within its frame. That such responsibilities exist we are slowly beginning to recognize.

DEFINITIONS

Capitalism. An economic system in which production is carried on by a roundabout process, that is, by investing in plant and machinery now which will make goods for consumers in the future. Note that the capitalistic method of production may be found in both the United States with its private enterprise system, and in Russia, where it might be called a system of *state capitalism.*

Laissez-faire. Term applied to economic system in which business is under no governmental restraint or control.

Private-enterprise system. An economic system characterized by relatively free exercise of individual judgment in making business decisions, private ownership of economic goods, dominance of the profit motive, and protection of personal economic liberties.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What is a private-enterprise system?
2. Why does private business need some government control?
3. What are the chief private rights in our private-enterprise system?
4. What limits does an economy place upon that right?
5. What is meant by "the right to private ownership of property"?
6. Why cannot a private-enterprise system be a system of complete individual liberty?
7. What prevents both anarchy and despotism in the private-enterprise system?
8. Why is not competition a sufficient control?
9. What is meant by "the right to enter and withdraw from business"?
10. What is meant by a "public utility"?
11. With the exception of the public-utility areas, are individuals free to enter any business at will?
12. Do business men have perfect freedom in making such decisions?
13. What is the role of the state in the use of contracts?
14. Do we have free competition?
15. What social losses may follow intense competition?

B

1. What standards may be set up for distinguishing unfair competition?
2. Who makes the fundamental economic decisions in a private-enterprise system? In a communist system? On what basis are the decisions made in these two systems?
3. Why have we been moving towards greater governmental control of private business?
4. How much equality is there in the United States: economic; social?
5. What would be the effect on our economy of the sudden institution of a system of complete laissez-faire?
6. "A private-enterprise system leads inevitably to concentration of wealth; the concentration of wealth leads inevitably to a concentration of power." Is this true? To what extent has it occurred in this country?
7. To what extent was the American Revolution fought to establish a private-enterprise system on this continent?
8. Is it accurate to compare the role of government in a private-enterprise system to that of an umpire or referee?
9. Does the growth of giant industrial units carry the seed of the destruction of the private-enterprise system?
10. "One difficulty is that a theory of private enterprise designed to operate in a period of hand labor has been accepted by a society which uses machine labor." Is this true? What is its significance?

C

1. Write a report on the controls of private enterprise which function in your home community. What types of controls are there? How effective are they? Who controls the controls? What would happen if they were abandoned?
2. Write a report on the growth of social control of private business, as illustrated by federal legislation of the last decade.
3. Select one industry (automobile, petroleum, railroad, etc.), and write a report on the functioning of private enterprise in that industry.

SUGGESTED READING

Simons, Henry C., *A Positive Program for Laissez-Faire*, University of Chicago Press, Chicago, 1934.

Slichter, S. H., *Modern Economic Society*, Henry Holt and Company, Inc., New York, 1931, Chap. III.

CHAPTER 4

THE RESPONSIBILITIES OF BUSINESS MANAGEMENT

In the private-enterprise system business men act as individuals, motivated by the hope and expectation of earning profits, without much planning or careful examination of the relationships of their ecomomic actions. Business activity appears to go through alternate periods of prosperity and depression. Workers at times receive high wages with full employment and at other times low wages or perhaps even no wages at all. Except in periods of wartime industrial mobilization, we have never experienced a continuous period of extensive business prosperity accompanied by full employment of labor at high wages and full utilization of natural resources and productive equipment. Sooner or later the burst of activity has come to an end, to be followed by years of grinding depression, unemployment, and low wages. Depressions have varied in their severity, and some of them have been so prolonged and so severe as to raise doubts in many minds as to whether we are using our resources, equipment, and labor power wisely.

The differences which are suggested by these problems all seem to center around one observation — is private business really private? Do private business men have any responsibilities except to the owners of business enterprise? Are they responsible to their employees for any of their actions? Are they responsible to other business men? Must they accept any share of the responsibility for general business activity, or are they responsible solely to themselves, with the accompanying postulate that whatever happens to general business activity, to employment, to the welfare of the 131 million citizens of this country happens strictly by chance?

THE EXISTENCE OF RESPONSIBILITY

Toward what end should economic activity be directed? A number of programs might be drawn up to express what might be termed "desirable ends" of economic activity. Perhaps the one

which follows would not arouse serious opposition from many students of the business world.

Desirable Economic Ends

1. The production of the largest possible national income:
2. At the lowest possible cost in terms of usage of natural resources and labor power.
3. With the widest possible freedom for each individual in his choice of work.
4. With the widest possible freedom for each individual in the expenditure of his income.
5. With the most extensive possible employment.
6. With the greatest possible security of livelihood.

If this program is accepted as a reasonable statement of the ends toward which the economic society should direct its efforts, it is difficult to escape the conclusion that business men have certain responsibilities. Even in an economy of extreme individualism we must admit that the actions of private citizens affect other private citizens, affect social groups (consumers, investors, workers), and affect the general level of business activity. And if the actions of private citizens have such widespread effect on so many diverse interests, then private citizens must accept the responsibilities which their influence imposes.

The Effects of Business Actions. By his decision to invest money in a factory, the business man extends employment. By his decision to invest money, he stirs other business men into activity in supplying materials for his factory and machines to install in the factory. The increased activity of his suppliers in turn provides more employment for more workers and more expenditures for more raw materials. The cycle of activity which began with the initial decision to build a factory and put it into operation extends employment to workers, which in turn increases the amount of money these workers have to spend. Their increased spending for food, clothing, shelter, automobiles, and other merchandise in turn increases the sales of a great many types of retail enterprises. The multiplication of this type of spending may lead to increased employment in retail stores. It will certainly lead to increased sales of merchandise through retail stores, which in turn will cause increased sales for manufacturers and so induce a speeding up of production. All these results may flow

from the individual decisions of private business men to invest money.

A parallel series of events will follow the decisions of private business men to contract operations. The manager of a factory may find his sales decreasing, possibly because competitors have discovered how to improve their products and make them more attractive to consumers. The manager of the factory may decide to close the plant rather than continue to operate at a loss. His decision immediately throws all of his laboring force into the ranks of the unemployed. If they cannot quickly find jobs elsewhere, their income is either reduced or entirely cut off. Their spending decreases as they are forced to rely upon accumulated savings. Retail sales decline and part of the decline is passed back to the manufacturers who produce the goods offered for sale in retail stores. At the same time, the closing of the factory has also meant that the suppliers of raw materials, fuel, and power no longer can sell their goods or their services. The decrease in their operations may lead to further discharge of workers in their plants with consequent drop in retail sales, and may also curtail their purchases of raw materials and power, with a consequent passing on of the depressing effects of the first decision to withdraw from business.

Private Decision and Social Responsibility. In both examples the social effect of private decision is clear. It is difficult to escape the conclusion that the business man must at least share the responsibility for these social effects of his personal decisions. No business decision can be imagined which does not extend its effect at least to a few people outside the range of the business man who makes the decision. The larger the company, the more extensive the decision, the wider the social effects.

In the American business world today, in which the typical business unit is the large corporation, the social effects of private decisions extend far beyond the walls of the factory within which each decision is made. The social responsibilities are extended in the same way. It may have been possible, in the business world of the eighteenth century, to assume the position that the business man had few responsibilities, that what he did was strictly his own affair, benefiting only himself if he acted wisely and hurting only himself if he acted foolishly. The growth of giant corporations, employing thousands of workers, the increasing dependency of human beings in a mass-production economy of

specialized labor, have made it increasingly difficult to maintain the argument that each business man is a private world unto himself. They have made it increasingly obvious that every decision affects others, and that the responsibility for the results of decisions cannot be passed off as inconsequential.

THE CASE AGAINST RESPONSIBILITY

What arguments can be advanced against this line of reasoning? A strong case for individual control of business decisions with no acceptance of individual responsibility might be expressed in the following way.

Private Enterprise. In our private-enterprise system the business world is founded on equality of opportunity. Within the legal framework which protects personal and property rights, enforces contracts, and preserves competition, each individual is the master of his own destiny. No coercion is possible. No force is permitted to one and not to another. It is a system of free exchange. In every such free exchange each of the two parties concerned is attempting to profit at the expense of the other. The transaction is private and not a matter of public concern. If one participant loses as a result of the exchange, that is the price he must pay for his failure to act wisely. Society must not protect him, beyond its general devices for protecting everyone.

Individual Competition. If it be objected that in the modern business world with its intense division of labor few are self-sufficient, and that as a result people depend on each other, the reply is made that the state provides a general protection from monopoly. By forcing business men to compete, the essentially private nature of business is preserved. Since competition leads to rivalry in effective service of consumer demand, even the consumer is protected in the right to make private decisions. He may spend his money as he pleases. His position is strong enough to let him bargain on equal terms.

Basic Provisions of the Private-enterprise System. In this private-enterprise economy the individual gets a fair start in life, equal opportunity to advance, equal protections against monopoly, an equal chance in free exchange, equal chance to win or lose as his personal aptitudes and efforts determine. In this way everyone tries as hard as he can, or as hard as he wants to; no one is a public charge and no one has a public responsibility.

If it be objected that business depressions can be traced, in part at least, to the private decisions of individuals, and that here is a case of unrecognized responsibility, the reply is that depressions would be less severe and less prolonged if government did not intervene. Depressions are an inevitable accompaniment of progress. The economy advances by fits and jerks. Depressions are a small price to pay for the tremendous release of human energy in the private-enterprise system.

In this system there can be no private responsibility, except that which a man owes to himself as the architect of his own future. The task of government is to safeguard an equal start in life and to maintain those conditions of free competition which permit each man to secure that which he deserves.

THE CASE FOR RESPONSIBILITY

What is the argument on the other side? Again let us review the reasoning without attempting to criticize it. Why are business men responsible for their actions, and why does that responsibility extend beyond their own pocketbooks?

Absence of Economic Equality. In the first place, it is denied that all business transactions are between equals, with no undue power on one side or weakness on the other. The poor boy does not start from the same point or with the same protection as does the child of wealthy parents. The small business firm does not stand on an equal footing with the large enterprise. The individual workingman is not in as strong a position as his employer. The man with a family to support and with no savings in the bank is not in a position to refuse the first job offered, even if he does not think the wage is fair or the conditions of work attractive. The consumer seldom possesses enough information about merchandise to spend his money wisely.

The reasoning suggets that since the private-enterprise system does not provide a foundation of equality in bargaining, the theory is false which says that every man rises or falls as a result of his own effort or lack of it, his own wisdom or stupidity. Hard work and talent may be defeated by economic power which itself may be nothing but the inheritance by a new generation of the plunder of the preceding generation. Under these conditions one of two things must follow. Power will be centralized in fewer and fewer hands while the derelicts of society increase in number with every

passing generation. Responsibility for the weak in the bargaining process must be assumed by the state. This, in effect, means the abandonment of the private-enterprise system.

Society's Share in Private Costs. The argument contends, further, that business men who deny responsibility and stand by the doctrine of every-man-for-himself earn profits by throwing on the public part of the costs of running their enterprises. The employer who attracts workers from out of town, gives them work for several months, and then shuts down his plant, forces his former employees to depend either on private charity or on public assistance. The employer who discharges older workers because they can no longer produce at the required rate makes them turn to public agencies for support. The owner who transfers manufacturing operations from one section of the country to another leaves behind him unemployment and lower tax revenues.

Are business men refusing to regard the facts squarely when they say that these unfortunate occurrences are an inevitable accompaniment of private enterprise and that either private or public charity must pay the cost? Or are these really part of the costs and part of the responsibilities of business management?

Private Business and Depressions. As for the depressions which periodically reduce business activity, causing widespread unemployment, idle factories, "poverty in the midst of plenty," if they are the inevitable accompaniment of the private enterprise system, then the business men of the system share the responsibility. Nor is it agreed that depressions are a small price to pay for the advances of the system. It is pointed out that this may have been a sufficient explanation when business was small, but that the depressions are too severe to be endured in a modern economic state. Now government is asked to intervene to bear part of the shock, and this is clear evidence that the reponsibility belongs, in reality, to business men. The depression is just another "social cost," like unemployment or the older worker, which should be charged against private business as part of total costs of production.

WEIGHING THE ARGUMENTS

What appraisal can we make of these opposing lines of analysis? Does it not appear that the effects of private-business decisions spread through the economy like ripples from a stone flung into a

pool? Admitting that each *decision* influences others, must it be granted that each *decider* is compelled to assume responsibility? Is it not clear that *some agency* must assume responsibility? If not private business, then government? And if the responsibility is assumed by government, what is left of the private-enterprise system?

Changing Social Attitudes. Recent trends in business thinking indicate a growing awareness of the close relation between the interlocking web of the modern business world and the spread of social responsibility. Clearly the effects of business transactions extend beyond those who participate directly. The interest of the public is present in almost every transaction.

Human Consequences of Industry. Further, we are beginning to realize that the human effects of industry are a direct concern of the employer of labor and the maker of management decisions. If there are inequalities in business bargains, there may be inequalities in the treatment of those who make the bargains. Even the mentally alert and the physically capable may be helpless before the force of a major depression to the onset of which they did not contribute and for the termination of which they cannot as individuals take action. For the great mass of those with limited training and aptitudes, without the support of assured living or accumulated savings, there is no possibility of action in self-protection.

These conditions are a responsibility of the private enterprise system. This means little more than that they are the responsibility of individuals who act within and benefit from the system. The cost of preserving the system is the sharing of responsibility for all individuals and all activities bound in the common web.

STATEMENT OF MAJOR RESPONSIBILITIES

The significant responsibilities of business men in the private-enterprise system may be summarized in the following way:

1. Satisfaction of consumer wants.
2. Earning profits.
3. Employment of labor under conditions of benefit to society with respect to wages, hours, and conditions and continuity of employment.
4. Advancement of production techniques.
5. Sharing the profits of increased efficiency among capital, labor, and consumers.

1. *The Satisfaction of Consumer Wants.* All business exists for the satisfaction of consumer wants. Profits are earned largely as a result of satisfying wants or convincing consumers that wants have been satisfied. It is a prime responsibility of business management, (1) to find out what the potential customers of the business want; (2) to compare the product of the business with the wants of consumers; (3) to adapt the product to the wants. In the case of those businesses which manufacture goods sold to ultimate consumers for private use (so-called "consumer goods," such as food products, clothing, radios, refrigerators, and automobiles), the satisfaction of wants may involve extensive research into consumer-buying habits.

A manufacturer of small electrical appliances decided to add electric clocks to his line of products. The mechanism having been worked out in the laboratory, the next question concerned the designs of the clock cases. The company's designer sketched 20 different styles of clocks to be used in living rooms, boudoirs, and kitchens. Reporters were sent out to question men and women in order to secure their opinions of the designs. Each person interviewed was shown the 20 designs and asked to give opinions on the following points:

a. Favorable or unfavorable reaction to each design.
b. Reasons for the reaction.
c. Illustrations arranged in order of preference in each group — kitchen, boudoir, and living room.
d. Clock design selected as the one interviewee would choose to buy.
e. Price that would be paid for these clocks.
f. Indication of color preference for the several models.

Consumer research of this type is constantly used by business men to secure information about the changing patterns of consumer wants. Research of a similar nature is carried on by manufacturers of producer's goods (factory machines, tools, and raw materials) for the same reason. It has been clearly demonstrated that the business man who fails to maintain a close acquaintance with the desires of his present and potential customers will eventually discover that he is losing sales to his competitors. A basic principle of sales management asserts that it is much easier to sell

people what they want to buy than to induce them to buy what you want to sell.

2. *Earning Profits.* Business men are in business to make profits. Business is neither a game nor a charitable enterprise. It is unreasonable to expect a business man, as a permanent management policy, therefore, to direct his affairs in terms of general social ends. He must, and should, think first of those policies which will increase and stabilize at a reasonable level the profits of the enterprise for which he is responsible.

But it is important to draw attention to the distinction between immediate or short-run profits and long-run profits. The future success of any business enterprise depends on the good will which today's policies will win. Every business manager is constantly brought face-to-face with decisions which call for a choice between taking an immediate profit, with the risk of bad effects in the future, or deferring immediate profits with the possibility of substantial gains in the future. A retailer can increase sales and profits for a limited period by purchasing merchandise of questionable quality and advertising it in a series of special sales which speak in extravagant terms of unusually low prices. In the long run, such a policy will destroy the confidence of customers in the quality of the store's merchandise. The manufacturer of a food product may increase profits for a limited period by lowering his inspection standards, but customers will slowly become dissatisfied with the product and shift their purchase preference to another brand. A program of research designed to lead to eventual improvement of a technical product may increase costs for several years with the result that short-run profits are either reduced or wiped out. The policy may be entirely worth while in the long run, after the research program has made significant contributions to the evolution of an improved machine which can be sold to customers with confidence that it will serve their needs better than any competing machines.

Responsibility for profits may be aligned with a socially constructive management outlook in terms of long-run profits, despite the fact that some of the most predatory business activities are the result of profit seeking. In almost every instance, these vicious activities are allied with the winning of short-run profits. Such tactics are not merely suicidal for the society in which business operates; they are evidence of shortsighted management. They

are to a large extent self-curing, through the medium of bankruptcy and failure.

3. *Employment of Labor.* We have already pointed out that in the modern economy of specialized labor the individual workingman depends upon the willingness of some employer to offer him a job. In a sense the business man also depends on the same offer of a job, for the great majority of consumers of goods and services in the United States are individuals who *work for* others. Unless there is widespread employment of available workers, the great body of consumers will not have incomes with which to implement their desire to purchase goods and services.

The responsibility to employ labor is, therefore, both a social responsibility and a private responsibility. It is a social responsibility because neither the private enterprise nor any other system can long endure if it does not offer to most of the available supply of workers an opportunity to work. It is a private responsibility because the development of sales for practically every business concern depends upon the existence of a large number of customers with money to spend. Each business man's employment of labor makes a contribution to the sales potential of every other business man. Every worker is a consumer. If he is denied work, he must consume less. If he consumes less, sales decline, profits vanish, and others in turn are refused employment.

This close alliance between working and consuming suggests an extension of the basic responsibility. There exists, for the business men, not only a responsibility for the employment of labor, but a further responsibility for the employment of labor under conditions of benefit to society as a whole, with respect to wages, hours, and conditions and continuity of employment. Again the supporting reasoning draws attention to both social and private benefits.

The social health of industrial communities in England in the early part of the nineteenth century was dragged down by the generally low level of wages paid for mill labor, by the long hours which working people spent in the factories, by the employment of children and women at tasks beyond their strength, by degrading working conditions for all factory employees, and by a management policy which ignored the problems of seasonal employment and condemned the older workers to the industrial scrap heap. The social health of American communities in which even an

approximation of these conditions is permitted to exist is subject to the same decay. Health and morale are attacked directly. The full potentiality of the democratic way of life cannot be realized. Educational opportunities are not utilized. Even where an attempt is made to secure a partial utilization, the results are weakened by the eroding influence of depressing working conditions and ill-lighted, unsanitary factories.[7] Ambition and courage are cut off in blind alleys in which the rule is "Live to work" — not "Work to live."

The social benefits which flow from the eradication of this type of industrial community are clear. But no less significant should be the private benefits. Testifying at the opening hearings held by the Temporary National Economic Committee in December, 1938, Dr. Isadore Lubin, Commissioner of Labor Statistics, called attention to the fact that 54 per cent of the families in the United States have incomes of less than $1250 per year. Assuming that the income of those families receiving less than $1250 per year could be increased by $2.25 a day, Dr. Lubin said:

> They would buy 800 million dollars worth of food more than they buy now; they would increase their purchase of clothing by 416 million dollars; they would spend 213 million dollars more for fuel, light, and refrigeration; they would spend 385 million dollars more on transportation, automobiles, etc.; they would spend 73 million dollars more on personal care; they would spend 234 million dollars more on recreation; they would spend 208 million dollars more on medical care.

Continuing, he stated that this increase of $2.25 a day would have a tremendous effect upon production and upon employment.

> I might go a step further and say that if there are moderate increases in the incomes of all families and single individuals receiving less than $2500 . . . you could expect that most of the surplus capacity in the United States would disappear, and in many of these industries our present capacity would run far short of the demands by the population of this country. . . . This is more than an ethical problem. It is not only a question of having everybody in good health and good spirits; there is more than that to the problem. To me it is a problem of keeping the gears of this economic machine in mesh.

4. *Advancement of Production Techniques.* Competition forces the managers of business constantly to devote attention to the improvement of production techniques. Under the competitive private-enterprise system American industry has been revolutionized many times over and the productivity of machines and labor has

been multiplied. One evidence of this striking advance in productive efficiency is the fact that the output of goods per worker engaged in production was almost four times as great in 1940 as in 1870. It has, indeed, become a widely accepted management principle that failure to conduct continuous research looking to improvements in the manufacturing process is one of the most serious errors of which management can be guilty and one of the easiest ways for a firm to be beaten in the race for profits.

Here, too, can be observed a commingling of private and social responsibilities. Innovation, invention, and improvement maintain a business in a strong competitive position and protect its earnings in the private-enterprise system. At the same time they hold out for the society as a whole the promise of a rising standard of living, measured by the outflow of goods from factories. They serve as a sieve which sorts out the inefficient enterprises and retires them from the competitive struggle. And although the decisions of the competitive process are not always just (for unfair competition, or discrimination, or an unfortunate failure of needed transportation services may handicap an efficient forward-looking concern), they are impersonal and operate in a broad way without private prejudice or emotional bias.

5. *Sharing of Profits of Increased Efficiency.* The primary result of increased operating efficiency which enables a business concern to secure a larger share of the consumer market or to reduce costs of production or distribution is to increase the net receipts of the business over and above all expenditures. The directing head of such a concern then shoulders the responsibility of deciding what to do with the surplus. It may be allocated in one or more of three ways. First, it may be turned over, as profit, to the owners of the business. Second, it may be given to the employees in the shape of higher wages. Third, it may be shared with consumers by lowering prices. The owners of the concern have an obvious private interest in the disposition of this surplus. But society as a whole has an interest, also, for the decision to apportion the surplus in one way, rather than another, entails discernible social consequences.

Retention by the owners of all the profits of increased efficiency is clearly within their power. Whether it is wise is another question. For if the level of operating efficiency has been raised through a forced speeding up of plant operations or through the

substitution of machines for labor power, employees will feel a natural right to share in the profits of increased productivity. Denial of that right may lead to dissatisfaction and frictions, and may precipitate serious personnel problems. There is an impressive collection of economic thought which argues that the failure to share with employees the profits of increased efficiency contributes to a deficiency of consumer purchasing power which is cited as one of several factors creating business depressions.

A business concern may distribute among consumers part or all of the profits of increased efficiency, through the device of lowering prices. If this action is taken, it will be a powerful competitive weapon. It will secure to the business a greater share of the industry's total sales volume, which, in turn, may lead to a further increase in profits. As a matter of fact, this translation of profits into lower prices has been a standard practice of many enterprises in competitive industries.

Here, too, private and social responsibilities are intermingled. Decisions relating to the apportionment of the profits of increased efficiency among owners, workers, and consumers clearly influence immediate and long-run profits of the enterprise. They affect labor relations. They bear upon the allegiance of customers. The accumulation of a series of similar decisions in a series of enterprises may have repercussions throughout the economy, directing the course of general business activity, retarding or stimulating consumer purchases, depressing or advancing the national standard of living. It may mean the difference between a low rate of industrial production with a high price level, and a high rate of industrial production with a lower price level. An impressive group of business men and economists are agreed that the health of both private business and our entire society depends upon the decision to grant an adequate share of the profits of increased efficiency to workers, as higher wages, and to consumers, as lower prices.

Training for Responsibility. One major task of the school of business is the education of a group of future business leaders possessed of an understanding of the functioning of the private-enterprise system and the responsibilities of business men in the system. Increasingly, economic conditions in the United States make it necessary for the framers of business policy to recognize, accept, and act under these responsibilities. The vanishing of the

frontier, the transformation from an agricultural to an industrial nation, the growth of big business, the increase in the economic dependency of the wage earner, the knitting together of the finite parts of the business world, the speed of action and reaction in the close-knit economy, the existence of inequality of opportunity, and the limitations in free choice and free action compel the acceptance of responsibility.

One need not possess an unusually pessimistic outlook to conclude that unless business leaders recognize these responsibilities and act accordingly, the continuance of the private-enterprise system may be seriously endangered. The growth of schools of business and their instillation of a professional attitude in future business managers hold out the promise that the enterprise system will be maintained. Recognition of the link between private and social action does not mean the abandonment of the profit system. There is no divergence between long-run profits and the acceptance of social responsibility by the business man. There may be a divergence between the acceptance of that responsibility and the earning of short-run profits. But no thoughtful executive would hesitate in the choice between short- and long-run profits. No business enterprise can be run as a continual fire sale. Good will and customer confidence are slow to grow and long-enduring; no present sacrifice is too high a price for future security.

On this foundation the private enterprise system not only presents a history of magnificent accomplishment, but holds out for the future a greater promise of opportunity and reward for all.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What are the major desirable ends of economic activity?
2. How does business investment affect employment? Consumer purchasing? Retail sales?
3. What are the major arguments against the recognition of the social responsibilities of private business?
4. Is seasonal unemployment a cost of private business?
5. What is meant by the phrase; "All business exists for the satisfaction of consumer wants"?
6. Why is it easier to sell people what they want to buy than to induce them to buy what you want to sell?
7. Compare the employment of labor as a social and as a private responsibility.
8. In what sense is the advancement of production techniques a social responsibility?

9. What are the effects of retention of all profits by owners?
10. What are the effects of distributing the profits of increased efficiency among customers through the medium of lower prices?

B

1. What evidence from your personal experience or reading can you cite to indicate that private business is, or is not, really private?
2. Are business men responsible to anyone except the owners of business enterprise?
3. Are business men responsible to their employees? In what sense and to what extent?
4. Do business men have responsibility to other business men?
5. Is there real equality of opportunity in modern business?
6. Does the cost of providing relief for the unemployed really represent a business cost which business managers have passed on to the community, the state, and the nation?
7. Does the operator of a New England textile mill who transfers his plant to North Carolina have any responsibility to his workers in New England?
8. What contrasting philosophies are represented by these statements: (*a*) Let the buyer beware. (*b*) Let the seller beware?
9. How do you reconcile the profit motive with the acceptance of social responsibilities?
10. Do you think education can contribute to the recognition of social responsibilities? How?

C

1. A machine has been invented which, it is claimed, can pick cotton faster and at a lower cost than it can be picked by human labor. Many people have suggested that it is socially undesirable to permit such a machine to be utilized because it will cause widespread unemployment. It is charged that the entire economic balance of the South will be upset, with ensuing hardships for millions. What attitude should be taken by the inventor? Should inventions be subjected to review from the standpoint of social costs? Write a report discussing this problem.
2. A plant manufacturing Diesel engines is located in a small city whose industrial life centers around this single concern. Due to rapidly increasing sales the company hires new workers. Soon most of the available local supply of labor is at work in the plant. Business continues to expand. An effort is made to attract young men from the surrounding farming territory. Only a few are willing to work in the factory, and it is soon discovered that most farm boys find it difficult to adapt to factory working conditions. It is proposed that the company should attempt to draw workers from a large city 100 miles away. Immediately the objection is raised that the increased volume of business is temporary and cannot be expected to continue. Men will come with their families and settle in the community. When the period of expanded sales comes to an end, the new workers will be thrown out of jobs. There is no other local source of employment. They will become charges on the community's social services, charity cases. Therefore, added

sales opportunities should be refused and operations should be maintained at a level which the local supply of labor can support. What attitude should be taken by the manager of this business? Why? Would you apply your reasoning to all cases of plant expansion?

3. What obligation does a company have to provide for the old age of its employees? Why? Should this be regarded as part of the normal expense of doing business?

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PART TWO

THE BASIC TOOLS OF BUSINESS MANAGEMENT

The Use of Tools in Business Management

Business management is a science because it depends directly on the systematic accumulation and organization of factual material. It requires judgment and interpretation in dealing with new and changing situations. It cannot be carried on in the abstract. It is a concrete, living thing and it depends on tools. As a carpenter needs good tools in order to do good work, so the quality of the work of a business administrator depends on the tools available to him.

The basic tools of business management are of three types: (1) those concerned with the collection and organization of facts, namely accounting, statistics, and field and library research; (2) those concerned with the collection and organization of man power, namely the forms of business and personnel organization; and (3) those concerned with the collection and organization of ideas, namely the principles of economic relations.

Because the best way to acquire skill in using tools is to begin by finding out what they are and what they do, we introduce the study of business with a series of chapters taking up in turn each of the major tools of the business administrator.

CHAPTER 5

ACCOUNTING

Accounting is the first of the basic tools of business management which are concerned with the collection and organization of facts. The function of accounting is to record, organize, and interpret the financial records of business. Since the financial records of a business are written statements describing its activities in terms of money, we can define accounting as a business tool which collects and organizes all the facts about business which can be expressed in monetary units.

In this sense the accumulated accounting records of an enterprise provide a history of the enterprise from the date of the first record of the first transaction to the most recent notation of the last transaction. In the hands of a skilled accountant, these records become more than a mere notation of the financial history of a business. They suggest the reasons behind business trends and developments. On the surface, they tell what has happened. Interpreted correctly, they also tell why it happened. Since they bring the history of the business up to date, they provide a record of what is happening. Reviewed with imagination and understanding, they may help the business man to forecast what will happen in the future. Records which on the surface seem to offer no more than summaries of past performance, indicating whether the business has earned profits or suffered losses, indicating how much money, merchandise inventory, factories, and equipment the business owns and how much money is due to others, may in reality present a statement of reasons, forces, and trends of even greater value to the business administrator than the actual accumulation of facts.

THE HISTORICAL DEVELOPMENT OF ACCOUNTING

The earliest accounting records were probably notations of borrowing and lending, and undoubtedly antedate the invention of writing. As the size of individual holdings of property increased, more complete records were kept. In medieval England the

problems of managing large estates created administrative tasks comparable in scope and complexity to those of the modern corporation executive. A number of treatises dealing with these administrative problems were compiled in the thirteenth century, of which one of the most interesting to the modern student of accounting was Bishop Grosseteste's *Rules of Managing an Estate.* Then, as now, accounting was the most useful administrative tool. The bailiff, serving as administrative agent for the estate, maintained accounts from which the lord might ascertain what rentals had been paid or were still owing, and the amount and value of personal services performed by the tenants. Accounts were usually maintained by a single-entry system divided into two parts, income and outgo. A balance of these schedules indicated, at the conclusion of the accounting period, how much was due the lord of the manor. A periodic physical inventory of the manor also indicated the extent of the capital goods, and a comparison of inventory totals at several inventory periods indicated the rate of growth or decline of the physical-property account.

Accounting techniques were still in a rudimentary stage, largely because the social and economic structure had not yet created a need to devise more advanced techniques. There was nothing comparable to the modern system of cost accounting by which actual and detailed costs of specific undertakings might be recorded and analyzed. Nor had the modern system of double-entry bookkeeping been devised. But the practice of simple single-entry accounting was widespread and on a surprisingly uniform basis.

Contributions of Petty Capitalists. The business activities of the petty capitalists and artisans also demanded a system of accounts for the maintenance of orderly and understandable records. In early times these, too, were largely single-entry records of receivables and payables. Records of this type were sufficient as long as the business was small, affairs simple, and ownership and management combined in a single person. As business affairs grew more complex with the development of the sedentary merchants who appeared in Italy in the fourteenth century, in England in the fifteenth century, and in America at the end of the seventeenth century, pressure was put on the keepers of records to supply safer and more complete notations of business affairs. In some way yet unknown to historians, the principles of double-entry bookkeeping were worked out. By the middle of the fifteenth century

treatises were being written describing the new accounting system. The demands made on accounting techniques by more complex business affairs can be understood when it is realized that partnership and employer-agent relations demanded not only information about receivables and payables, but also records of all cash and credit transactions, records covering the work of agents, and summary statements of allowances made to partners, profits paid to partners, and partners' interests remaining in the enterprise. These records had to be accurate. They had to provide a means for check on accuracy (through the system of double entry). And they had to be maintained in such a way that every partner would have confidence in the statement of profits.

Contributions of Industrial Capitalism. In the centuries which followed, accounting techniques were continually expanded to cope with the increasing complexity of business affairs. The period of industrial capitalism in the nineteenth century, which saw the splitting up of the coordinated functions of the sedentary merchant, witnessed the development of accountants as advisers to business firms. As business units became larger, with ownership spread among hundreds or even thousands of scattered individuals, accountants, who had formerly been inside employees amassing information for management, also established themselves as business auxiliaries independent of single enterprises. Public accountants appeared, ready to serve with advice and counsel, parallel to the work of lawyers, and also as independent checkers on the statements of internal employees. Cost accounting, perhaps the most exact and useful management tool in the control of modern business, was slow to develop. Its techniques were not materially advanced until the period of financial capitalism at the close of the nineteenth century.

THE FUNCTIONS OF ACCOUNTING

The foregoing historical description suggests the first of several principles of accounting procedure which will be discussed in this chapter, namely, that an accounting system should be just complex enough to supply the information which the business man using the system needs to operate his business successfully. And no more complex. And no less. Put in other words, the principle might be stated in this way. Accounting is a business tool. Like almost every other kind of tool ever invented, the accounting tool comes in

several shapes and sizes, each designed for a different business situation. As the master carpenter selects from a variety of saws the exact one that is best for the particular job at hand, so the business executive must select from an almost infinite variety of accounting systems the one best adapted to his business. A more elaborate accounting system will cost more than it is worth. A less elaborate one will not supply necessary facts.

Simple and Complex Records. The complexity of the accounting system to be found in a business enterprise will depend directly on the complexity of the enterprise itself. The smallest concern must maintain some records. The corner grocer will have a record of cash in the bank, total sales, amounts owed him by charge customers, and amounts he owes to manufacturers and wholesalers of grocery products. These records need not be elaborate, because the information he requires to manage his store is rather simple. In general, the business enterprises which engage in merchandising operations, that is, in buying goods and selling them again in the same form, need relatively simple accounting. The larger store requires a more complex system than the small store. The store run by a hired manager for absentee owners requires a more complex system than the store personally managed by a single owner.

More complex methods of accounting are required in enterprises engaged in manufacturing or mining. These operations usually require expensive and elaborate machinery and carry through several processes in which raw materials are changed in form. A statement of investment and inventory of raw materials, goods-in-process, and finished inventory requires an elaborate accounting system. Complex evaluation techniques must be developed, for machinery, plant, raw materials, or ore-containing properties must be given monetary equivalents for accounting purposes. Many of these valuations are difficult to make, yet upon their accuracy depends the exact statement of profits which, in a large manufacturing organization, cannot be calculated by the simple subtraction of merchandise costs from merchandise receipts.

Exact Measurements and Judgment. Precisely at this point we can draw the distinction between the exact, and rather mechanical, routines of accounting (usually described as bookkeeping) and those problems which call for the exercise of judgment. Problems requiring judgment are likely to arise chiefly in larger enter-

prises engaging in complex activities. A manufacturing business may own a number of expensive automatic drilling machines used to make cylinder borings. The machine may last eight years. Logically the expense of purchasing the machines should not be charged wholly against the income of the year in which they were purchased, for they will be employed productively not only in that year but probably for seven more years. Some allocation of the cost of the machines must be made to each of the eight years. There are various ways in which this may be done: one eighth to each year; more to the early years, less to the later; or less to the early years and more to the later. The accountant's judgment enters here, as it does, indeed, into the determination of how long the machine will last. The eight-year life may be difficult to foresee when the machine is purchased.

Another example which might be cited is that of the manufacturer who is attempting to determine the cost of selling each of several products in his line. Some of the products may take a great deal of the salesmen's time, while others may be sold with little effort. Some may be sold only in large lots, while others are ordered in small units at frequent intervals. The allocation of salesmen's expense, handling costs, and clerical wages to each of the products calls for experience and judgment, and the accountant's decision is never exact in the sense of two plus two equals four.

Accounting Serves Management. Accounting records serve three different interests in every business concern: the management of the enterprise; business men and business agencies outside the enterprise, who have relations with it as actual or potential creditors or owners; and divisions of municipal, state, or federal governments.

Accounting serves management by supplying the facts on the basis of which management takes action. This service can be divided into two important sections. The first is the accumulation and organization of information about the separate divisions of a business, such as production, selling, and financing. The second is the accumulation of these divisional records into an over-all report for the enterprise.

That division of accounting known as "cost accounting" is the most important tool in the hands of the production manager. Profit in business can be loosely defined as the difference between cost and selling price. Since selling price is to a large extent

determined by competition, profit depends in many enterprises on the effectiveness of cost control in the production department. The basis of cost control in production is accurate detailed analysis of standard operations measured in monetary units which place concrete values on raw materials, labor, share of machine cost, share of factory rent, and share of supervisors' salaries which are charged against every unit of production passing through the factory.

The determination of standard costs for each unit of product sets the level of expected expenses. Comparison of standard with actual costs gives management a check on the efficiency of operations. Where actual costs are above standard, the accounting system indicates the source of the difficulty in raw materials, labor, machine, or general overhead charges. Furthermore, the determination of standard costs per unit produced aids the factory superintendent to forecast probable costs of production when the factory operates at capacity, at three-quarters capacity, or at any other rate. Standard cost records also aid the superintendent in making estimates for the cost of producing a new article or one that embodies certain variations from the article regularly turned out by the plant.

Total costs of an enterprise are a combination of production costs and selling costs. The sales manager of a large enterprise maintains a control over selling costs similar to that set up by the factory superintendent. Here, too, cost accounting makes possible the determination of standard selling costs for each product sold, for handling orders of various sizes ranging from a carload to one-twelfth of a dozen, for selling to large and small accounts, for selling through a sales force as against selling by mail, and for selling in city and in country regions. Once standards of good performance have been set up, actual selling costs can be determined by the accounting system and checked against standard. Deviations from standard which lead to increased costs are immediately noted and can be traced directly to the source. The accumulation of selling-cost figures at frequent intervals gives the sales manager an accurate, rapid control over sales performance and expenses; this, in turn, protects profits and insures that no management decision is made without full information as a basis for judgment.

The financial division of an enterprise is directly concerned with

supplying and controlling the funds required to carry on the business. For the successful conduct of his office the chief financial officer must have a steady inflow of facts relative to the cash position of the enterprise, anticipated receipts of funds, outstanding debts, and anticipated expenses. He must be able to plot the financial course of the enterprise with as much assurance as the captain of a ship who depends on both his own experience and the recorded observations of others. The only source of this accumulation of financial facts is a carefully planned accounting system geared to organize all vital information and present it accurately and rapidly.

Accounting Serves Creditors and Owners. Two groups not directly affiliated with the management of an enterprise have a continuing and vital interest in the conduct of its affairs: the group of creditors, to whom the enterprise owes money, and the owners, in those instances when owners are not directly concerned with management. The most reliable sources of information about the company's assets, out of which the debts will be paid, and profits, which will be shared among the owners, are the accounting reports prepared by the company's accounting department and verified by an independent certified public accountant.

A further interest, in the case of those larger enterprises the securities of which are widely held by the investing public, is maintained by investment bankers, brokers, commercial bankers, investment analysts, insurance companies, and other purchasers of securities. Decisions to purchase or sell securities are made largely as a result of examination of recorded profits or losses and a comparison of the possessions of an enterprise and its outstanding debts. If reports are either incomplete or inaccurate, intelligent investment decisions cannot be made.

Accounting Serves Government. Accounting records are also significant for the maintenance of just relations between governmental bodies and business units. The first of these relationships exists in the area of taxation. The preparation of federal and state income-tax schedules falls upon the accounting department. The actual determination of the amount of the tax depends upon accurate and thorough accounting records of business operations. A further accumulation of legislation — federal, state, and local — necessitates supplying information available only through the accounting system.

In addition to the determination of various types of taxes,

problems of governmental regulation rely on accounting records. These problems arise in supervision of railroad operations by the Interstate Commerce Commission, public utility operations by federal and state regulatory commissions, security flotation by the Securities and Exchange Commission, and a variety of local business affairs by municipal administrative bodies.

ACCOUNTING INFORMATION

At this point it will be helpful to summarize all the basic information which can be supplied by accounting records. No attempt will be made to enter into detailed analysis, for the consideration of which the reader is directed to any standard work on the principles of accounting.

Statement of Assets. The accounting records of a business provide (1) a statement of what the business owns (assets) and (2) what it owes (liabilities). They present, on any given date, a tabulation of cash on hand and in banks, money owed to the business by customers (accounts receivable), and all other debts to the enterprise. If the business has invested surplus funds in bonds or stocks, the accounting system records the fact and states the most conservative appraisal of their value. This appraisal is usually described as a valuation on the basis of "cost or market, whichever is lower." Such a statement means that the appraised value of securities is the actual price paid for the securities if, at the date of the report, they can be sold for more than the initial cost, or, if the market valuation at report date is less than the cost of the securities, the stated value will be market price.

Other possessions of the business are also reported. These may include stocks of raw materials, goods in process of manufacture, and finished goods ready for sale. A retail store will obviously have only finished goods ready for sale; a manufacturing enterprise will list inventory in all three stages. It is customary to value inventory on the same conservative basis of the lowest price, cost or market. The enterprise may own real estate, automobiles, or other physical property used in its business affairs. The accounting system records these facts, and attempts to appraise their current value, giving due consideration to the using up in production of part of the initial value of the properties (depreciation). Any other assets owned by the concern will be listed in terms of conservative appraisal of current value.

Statement of Liabilities. In presenting a schedule of what the business owes, the accounting system will record money owed to banks, to enterprises which have sold goods or services to the business and are awaiting payment (accounts payable), and to officers and employees. It will also state tax indebtedness due and not paid. Further, if the business has borrowed money by issuing bonds, a statement of this debt will be made, describing the securities in detail. There will also be provided a statement of capital stock issued and paid for. Finally, there will be a statement of surplus, representing the balance of what the business owns in excess of what it owes (assets minus liabilities).

A report covering this information may be drawn up as of any date. It is commonly known as a "balance sheet," and may be described as an instantaneous photograph of the affairs of the business.

Operating Statement. In addition to presenting information about the assets and liabilities of the business *on a certain date*, the accounting system provides a summary statement of the results of business activity *during a certain period of time.* This is known as the "operating statement"; sometimes it is referred to as the "income statement," or as the "profit and loss statement."

Accounting information about business activity usually begins by stating total income from sales during the accounting period. If the enterprise under examination is engaged in manufacturing, total cost of merchandise sold is subtracted from total sales on the operating statement, yielding a figure commonly described as gross profit on sales. Next may come a statement of depreciation taken on plant and machinery for the accounting period. There will follow a schedule detailing selling, general, and administrative expenses, the total of which, subtracted from gross profit, yields a measure of the company's net profit before the addition of certain other items of income and certain other charges against profits. Income from investments and other income resulting from operations outside the normal activities of the business are added to the net profit figure. Interest on funded debt and on notes payable, and other nonoperating charges are subtracted from the net profit. Provision for income tax is also subtracted, and the resultant figure is the final statement of net profit or loss for the period under review.

Ledger Records. Both balance sheet and operating statement

are summary records. They represent, that is, condensations of the net results of transactions entered into during every business day. For detailed information about the events which underlie the totals, reference must be made to the set of detailed accounts which are commonly entered in an accounting record called the "ledger."

The ledger is a collection of all the individual accounts which show the assets, liabilities, and net worth, or proprietorship, of a business. It provides space to record, under distinguishing title, additions to or subtractions from each asset, each liability, and each proprietorship item. Every action of the business creates a change in the ledger accounts and should be recorded therein.

If the operator of a small grocery store, for example, starts the year with $1000 in cash and $5000 in merchandise, these facts would be entered in the two ledger accounts, cash and merchandise. If on the first business day he purchases $500 worth of merchandise and pays in cash, a proper recording would show a decrease in cash of $500 and an increase in merchandise of $500. If he received the merchandise on that day, but decided not to pay cash, preferring to delay payment for 30 days, then no change would be recorded in the cash account, but the division of the ledger labeled "accounts payable" would be increased by $500. When payment was made, cash would be reduced by $500, and a similar decrease would be noted in accounts payable. Every other business transaction — sale of merchandise, purchase of a truck, payment of outstanding bills by customers, payment of salary to employees — will be noted in the proper ledger accounts.

The classification of ledger accounts may be sub-divided to any extent made desirable by the nature of the business and the manager's need for detailed information about operations. Further, each of the ledger accounts may be in itself a summary of subsidiary accounts. The ledger account titled "accounts receivable" (money due from customers on unpaid bills) may be supported by a subsidiary ledger in which each customer's debt is carried under a distinguishing title. The organization of the ledger will contain both summary statements of all the accounts necessary to prepare a balance sheet and an operating statement, and also subsidiary ledgers containing detailed accounts, carefully arranged and clearly presented.

ANALYZING ACCOUNTING STATEMENTS

The balance sheet of a business enterprise presents a statement of the condition of the enterprise at the close of business on the balance-sheet date. It is probably the accounting statement used

TABLE 1

Simple Balance Sheet of a Small Business

ASSETS		*LIABILITIES AND PROPRIETORSHIP*		
Cash	$ 2,500	Note payable to bank		$ 4,500
Accounts receivable	4,200	Accounts payable		6,200
Merchandise inventory	10,300	Proprietorship		
Truck, less		Capital	$3,000	
depreciation	525	Surplus	3,825	
Total	$17,525			6,825
		Total		$17,525

most frequently, and is the first source of reference when an outsider desires to secure a concise and accurate picture of the condition of a firm's affairs. It is the first reference of a banker considering an application for a loan, of a potential supplier attempting to appraise the likelihood of securing payment for merchandise sold to the company, and of a business analyst attempting to gauge the company's strength and weakness. It assumes this importance because it is the only complete summary of all the company owns and all it owes, its assets and its liabilities. But the full value of a balance sheet is realized only when the facts which it presents can be understood and interpreted correctly.

Ratios. Certain analytical routines have been developed which assist one to understand and interpret balance-sheet statements. To a large extent these routines are based on comparisons between items or groups of items appearing on the balance sheet. These comparisons are usually expressed in the form of ratios. The extensive use of ratios in balance-sheet analysis has made possible the development of standard ratios (relation of one balance-sheet item to another, or of one group of items to another group) for various types of business which facilitate the appraisal of the position of any single company in terms of standard or good performance for a concern in that industry. Among the many comparisons

which are used in the analysis of balance sheets, we shall select only a few of the most significant for discussion.

1. *Current Ratio.* The current ratio is a comparison of total current assets and total current liabilities. Current assets include cash, items held as a substitute for cash (United States government bonds, for example), and other assets which normally will be converted into cash within one year, such as merchandise and accounts receivable. Current liabilities usually include those debts of the enterprise which will fall due within one year. The current ratio, therefore, is a measure of the ability of the business to pay its debts, or as it is sometimes termed, its "solvency." It is often pointed out that a safe current ratio is at least 2 to 1. This means that current assets are twice current liabilities.

Naturally enough, what may be regarded as a safe current ratio in one industry might not be called safe in another. In some industries a ratio of 5 to 1 might be regarded as safe. The common expression of 2 to 1 is merely a rough rule-of-thumb appraisal. Further, it makes a real difference to one interested in a concern's ability to pay its debts whether the company's current assets are largely in the form of cash, with a small residue of accounts receivable and in inventory, or largely in inventory, with only a small residue of cash. The value of an inventory may fall rather rapidly at times. An accumulation of current assets largely in the form of inventory may be greatly reduced by the time that inventory is converted into cash.

2. *Working Capital.* The working capital of a concern is measured in dollars by the amount current assets exceed current liabilities. Thus, if a concern's balance sheet indicated $50,000 of current liabilities and $125,000 of current assets, its working capital would be $75,000. The significance of working capital is that it represents the fund from which the expenses of operation can be met. Out of working capital, payment will be made for wages and salaries of employees, for the purchase of raw materials, for rent, and for all the other operating expenses. The possession of a large supply of working capital maintains an enterprise in a flexible position, ready to take advantage of every new business opportunity.

3. *Ratio of Current to Fixed Assets.* For many types of business it is significant to discover what proportion of total assets are current and what proportion are fixed (that is, all assets which are not

current, usually consisting of plant and machinery). It should be kept in mind, however, that no normal ratio of current-to-fixed can be established for all industries. There are obviously some industries, such as railroads or steel, which require a heavy investment in fixed assets, while others, such as retailing, do not. Comparison should be made, rather, with similar ratios in other concerns in the same industry, and for the concern under consideration in several successive balance sheets. In this last comparison, it may be readily seen whether a company's position is improving or growing weaker.

A number of other ratios are of importance to those attempting to appraise a company's position by an analysis of its balance sheet. A discussion of these ratios may properly be left to the specialized course in accounting, although the interested student may extend his reading in any standard accounting text.

Balance-sheet Changes. Although this discussion has centered its attention largely on the comparison of balance-sheet ratios with standard ratios for the industry and with balance-sheet ratios of other concerns in the industry, it should be noted that valuable information can be drawn from the study of changes in successive balance sheets of one company. This analysis may show a progressive strengthening or weakening of position, a growth or a decline in current assets or of working capital, an increase or a decrease in plant investment, a rise or a fall of cash in relation to other current assets, an enlargement or a contraction of bank loans, and many other developments all of which serve as signposts of management policy, measures of solvency over a period of time, and bases for appraising ability to pay debts.

Analysis of Balance Sheet and Operating Statement. Further information about the position of an enterprise is revealed by a comparison of certain items, some of which appear on the balance sheet and others on the operating statement. These are often referred to as "turnover" ratios. One of the most common measures of this type is the ratio of sales (operating statement) during a period to average inventory (balance sheets) during the same period. Thus if in the course of a year a company's sales volume amounted to $210,000 while the average investment in inventory was $30,000, the turnover rate would be 7.

The significance of this ratio is revealed by the observation that a rapid turnover of inventory usually contributes to higher profits. A

low rate of turnover means that merchandise remains unsold for long periods during which its quality may deteriorate or the peak of its style popularity pass. The inventory turnover rate is particularly important in appraising the merchandising effectiveness of the management of a retail store. For most types of retail stores, the enterprises which have the highest rate of inventory turnover also earn the largest profits.

Analysis of the Operating Statement. The operating statement of a business presents a summary report of income and expenses during the accounting period specified in the statement heading. It is an important management tool because it indicates not only the increase or decrease in income, expense, and profits, but also the *sources of* increases and decreases, from which may be derived the *reasons for* increases and decreases. In this way analysis of the operating statement may be a material aid in working toward more efficient control of business operations. As in the case of the balance sheet, however, all the information supplied in the operating statement may not be immediately clear and some of it may be misinterpreted. It is important, therefore, to understand the standard routines of analysis.

Business men, bankers, and investors customarily employ certain recognized ratio comparisons in their examination of operating statements. Before they are described, however, the reader must again be warned that the results of a ratio analysis of a company's operating statement should not be compared with similar ratios for concerns in other industries. Standard performance in one industry will differ from standard performance in another industry. The comparison should be made with other concerns in the same industry and with successive operating statements of the single firm under consideration. The first comparison makes possible an appraisal of relative operating efficiency, judged by competitive standards. The second comparison facilitates an understanding of trends in the concern's affairs.

Significant ratios in operating-statement analysis include the following: cost of goods sold as a proportion of net sales; gross profit as a proportion of net sales; selling expense as a proportion of net sales; advertising expense as a proportion of net sales; administrative expense as a proportion of net sales; and net profit as a proportion of net sales. (See Table 2.) These comparisons are all indicative of relative operating efficiency and the control of management over the company's affairs.

TABLE 2

OPERATING STATEMENT WITH RATIOS

					Per Cent of Net Sales
Sales			$875,412		100.39
Less: Returns	$ 975				
Allowances	2,334		3,309		.39
Net sales				$872,103	100.00
Cost of sales:					
Inventory, 1/1/40			$61,227		
Purchases		$721,390			
Less:					
Returns	$ 307				
Allowances	1,982	2,289	719,101		
			$780,328		
Less: Inventory, 12/31/40			69,207		
Cost of goods sold				711,121	81.54
Gross profit				$160,982	18.46
Operating expenses:					
Selling:					
Sales administration		$17,300			
Salesmen's salaries		59,555			
Traveling expense		15,328			
Advertising		21,938			
Delivery expense		11,005			
Warehouse expense		3,079	$128,205		
Administrative:					
Executive salaries		$13,000			
Office salaries		6,275			
Office rent		1,850			
Office supplies		1,950			
Telephone and telegraph		1,575			
Postage		680			
Depreciation—office equipment		500	25,830	154,035	17.66
Net profit from operations				$6,947	.80
Nonoperating income				2,500	.28
Net income				$9,447	1.08

Published Reports. A brief statement must be added about the published reports of corporations. As accounting records are made more complete, they necessarily become more complex and contain a larger quantity of human judgment as an addition to exact measurement. But many who have an interest in the material of the reports are not skilled in the interpretation of summary statements. Two groups in particular often experience difficulty in understanding the significance of accounting records: the group of small stockholders who are part owners of the enterprise, and the group of employees who work for the enterprise.

To meet the needs of these groups the larger corporations are developing presentations of summary statements for submission to owners and employees, which facilitate interpretation. Annual reports usually include the following information: a balance sheet as of the close of business on the last day of the accounting year; an income statement covering the accounting year between published balance sheets; a statement of surplus and its disposition; a statement, usually signed by the president of the company, explaining significant aspects of the company's business; and certification of the records by an independent public accountant. Increasingly, in recent years, an effort is being made to present this material in such form that it can be readily understood. Graphs are often used. Publication of essential information in this form may be regarded not only as a step toward greater comprehension of company affairs by those not skilled in the interpretation of accounting statements, but also as a measure designed to increase and strengthen investor and employee good will.

In March, 1941, for example, Sears, Roebuck & Company presented to the press copies of the most detailed report of operations in the 55-year history of the company. The report was printed in the form of a 40-page booklet. Balance sheet and operating statement were presented on a folded color insert with every item explained in detail. The report included a chart which portrayed graphically the distribution of the customer's dollar in 1940. The report called attention to the fact that the company employed more than 65,000 people, and that the owners of the company numbered more than 55,000 individual stockholders.

A company history, in another section of the report, described the increase in Sears' sales from less than $100,000 in 1890 to 11 million dollars in 1900, to 64 million dollars in 1910, to 225

million dollars in 1920, to 390 million dollars in 1930, to more than 700 million dollars in 1940. It told of Sears' business relations with 7000 manufacturers, and of its operation of 14 factories. Practically every aspect of the company's operations was described and analyzed in the report.

DEFINITIONS

Assets. Those items of wealth owned by an enterprise.

Balance Sheet. Summary accounting statement on which appear parallel tabulations of an enterprise's assets and liabilities; what it owns contrasted with what it owes as of a certain date.

Certified public accountant. An independent professional accountant, without affiliation with individual business enterprises, who is employed by business concerns to review their accounts. Public accountants examine accounting records and methods and prepare reports in which they state their findings as to the accuracy of balance-sheet and operating-statement summaries.

Depreciation. The exhaustion of serviceability of fixed assets, due to wear and tear of machinery, obsolescence, and similar causes. Conservative accounting methods attempt to charge as part of each year's operating expenses a portion of the total value of every fixed asset, so that its cost is entirely written off before its useful life has ended.

Double-entry bookkeeping. Attempts through two sets of parallel records to present two series of related facts: (1) record of what a business owns and what it owes; (2) record of original worth of business and all additions to or subtractions from that sum.

Ledger. A collection of all accounts which indicate assets, liabilities, and net worth of an enterprise.

Liabilities. What an enterprise owes.

Operating statement. (Sometimes called "income statement" or "profit and loss statement.") Summary statement of income and expense during a specified period.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What are the three types of basic tools of business management?
2. State briefly the function of accounting.
3. Why were the principles of double-entry bookkeeping worked out?
4. Under what period of capitalism did cost accounting develop into a science?
5. Name the three interests that accounting records serve in every business concern.
6. What division of accounting is vital to every production manager? Why?
7. How does the chief financial officer of an enterprise secure the facts necessary to the successful conduct of his office?
8. In what two fields do accounting records serve the government?
9. What does the balance sheet provide to management?
10. What do the ledger records contain?

11. How are comparisons between items or groups of items on the balance sheet and the operating statement expressed? Why?
12. Explain what is meant by "working capital" and why it is important.
13. Why is the inventory turnover rate especially valuable to retail stores?
14. Name three ratios which may be obtained from the operating statement, that are indicative of operating efficiency.

B

1. The three basic tools of management fall into three types. Which of these do you think is most important? Why?
2. Assume that you are president of a retail department store. How would you use the accounting records in planning for the future?
3. Can you explain how the bailiffs, the petty capitalists, and the industrial capitalists each found accounting helpful to them? What contributions did each group make to modern accounting procedure?
4. What is meant by the statement "the accountant must be a scientist as well as a jurist"?
5. Accounting records are said to serve three interests in every business concern. Choose a manufacturing plant in your home town and give concrete examples of how its records serve these three interests.
6. Would a cost accountant for an industrial plant be concerned with the cost of raw materials; the monthly rent; the wages of the foreman; the cost of order sheets for new supplies; and the electric bill for the plant? Explain why he would or would not be concerned with each item.
7. A firm places a new bond issue upon the market. If you were in search of a long-term investment, what would be some of the steps you would take before purchasing? Where would you secure any information you might desire?
8. Explain what is meant by the statement, "a balance sheet is a 'stationary' picture while an operating statement is a 'moving' picture."
9. If you were an accountant for a firm engaged in supplying services to the public—such as a legal firm—would you use ratios in your work? How?
10. Why is the proper analysis of accounting statements given such emphasis?

C

1. Write a letter to some industrial firm in which you are interested requesting a copy of its last annual report. Write a short report upon its contents. Study the statements presented and work out several ratios to help you analyze the condition of the firm. Tell why you think the condition is good or bad and support your stand.
2. Secure a copy of *Poor's* or *Moody's* financial reports in the library and contrast the difference between the statements of a steel manufacturing firm, a retail department store, and a food-manufacturing company. Prepare a short report discussing the differences in the statements and the reasons for these differences.

SUGGESTED READING

Hatfield, H. R., T. H. Sanders, and N. L. Burton, *Accounting Principles and Practices*, Ginn and Company, Boston, 1940, Chaps. I–IV, XXII, XXIII, XXV.

CHAPTER 6

STATISTICS

A PROBLEM IN STATISTICS

The Manatee Company[1] manufactured and sold men's shirts, ties, handkerchiefs, and underwear. The company's products were sold to wholesalers and retailers throughout the United States by a sales force of 40 men. The sales staff was organized in five divisions. Division One operated in New England under a branch office in Boston; Division Two operated in the North Atlantic states under a branch office in New York City; Division Three operated in the Middle West under a branch office in Chicago; Division Four operated in the South under a branch office in Atlanta; and Division Five operated in the West Coast area under a branch office in San Francisco.

The Manatee Company exercised little control over the activities of its sales force. In 1939, following the appointment of a new sales manager, it was proposed that more complete sales records be maintained. Specifically, it was suggested that the following reports be compiled every 10 days as an aid in controlling the sales force and directing their activities more intelligently:

1. A report of dollar sales volume by each salesman.
2. A report of sales in dollars and in units for each product in the company's line.
3. A report of gross profit for each product, computed by subtracting total manufacturing costs from total sales.
4. A report of sales in every sales territory, classified by products.
5. A report of sales classified by types of customers, such as wholesalers, chain stores, department stores, and small unit stores.
6. A report for each salesman, showing commissions earned, traveling expenses, and advances made against commissions.

To the statistician of the company was assigned the task of devising the form in which the several reports would be made, compiling the material as it was sent in from the field, accumulating

[1] Fictitious name.

the information for successive 10-day periods, interpreting the data, drawing charts and graphs dramatizing the material for presentation to the company's chief executives, and comparing the data with similar reports compiled by other concerns in the industry and available through the industry's trade association.

The statistical work involved in accumulating, organizing, presenting, analyzing, and comparing this information enabled the company to institute a close control over the activities of the sales force. This in turn led to a number of innovations in selling methods, in the type of customer sought by the company, and in the sales-promotion effort devoted to each product in the line. Sales volume increased, selling costs were reduced, salesmen earned larger commissions, and the company earned larger profits.

THE FUNCTION OF STATISTICS

Statistics is the second of the basic tools of business management concerned with the collection and organization of facts. It may be defined as a system of methods used to study numerical data and to extract from them simple facts. It is a science of measuring and analyzing facts stated in terms of numbers. Business statistics may be regarded as a branch or division of the general subject, which deals with the analysis, measurement, and presentation of business facts.

The function of statistics as a business tool may be described in the following terms:

1. To accumulate information in terms of numbers so that it may be classified, measured, and compared.
2. To organize the information in such a way that significant summaries are readily apparent.
3. To establish a routine technique for interpreting and analyzing statistical summaries so that past events may be accurately traced and the probable trend of future events may be charted.

Varieties of Statistical Problems. The statistical problems of the Manatee Company described above present only one phase of the business function of statistics. The sales manager of that organization was attempting to accumulate facts about current operations in such a way that what was going on in the selling division of the business could be quickly and clearly understood. With this knowledge action could be taken to improve the operation

of the business. Other business men might be concerned about other business problems to the solution of which statistics might contribute. One might be worried about price trends. Another might be considering problems of shifting centers of population. A real-estate dealer might welcome measures of the rise and fall of property values. A factory manager would desire information about trends in the prices of vital raw materials, or about the number of tons of rubber, coal, or copper in storage. An investor would be concerned about trends in security prices. The operator of an electric-light company would need information about consumer and factory use of electricity, with a record of hourly variations in demand. The manager of a local bus line would want facts about hourly variations in the demand for bus transportation, so that schedules might be developed to serve the public.

Difficulty of Statistics. These are all statistical problems. They involve the accumulation of information in terms of numbers, exact measurement, interpretation, and analysis. Concerning this type of information, it may be helpful to add a word of warning. Mathematics is not one of the most popular subjects in schools. Most people are half afraid of numbers and look upon them as more than a little mysterious. Why this should be so is perhaps itself a mystery, but as far as future business men and business women are concerned, it should be clearly stated that there is nothing in that section of statistics which business men use which should frighten anyone.

We are all calculating animals. By the very nature of his daily problems, the business man must employ calculation more than most. He need not be either confused by or afraid of the calculations of statistics if he remembers that numbers are simply the *language of size*, and that to a very large extent the business man was responsible for the development of this language. The business needs of European merchants in the Middle Ages were responsible for the founding of special schools to teach arithmetic. A large proportion of the first books printed on the first printing press were commercial arithmetics. When business was still in a rudimentary stage its leaders realized that they would be helpless without a simple, uniform language of size which was universally understood. The modern business man has inherited that need and his dependence on statistics is a measure of his debt to the inventors of that language.

The teacher of English composition points out that we study the rules of grammar so that when ideas are transferred from one mind to another by writing or speech there will be absolutely no misunderstanding about essential meanings. For the same reason, it is important to agree on certain techniques of mathematical statements used in statistics. It is even easier to reach such a common basis for agreement about the language of size because it is a rationally planned language, whereas the common speech is distorted by sentiment, vagueness, and idiosyncracy. People differ in their interpretation of words, but 2 + 2 = 4 at all times and in all languages.

Statistics Serve Management. In the last chapter we pointed out that the business tool, accounting, serves three different and important interests: the managers of business enterprise; business men and agencies related to the enterprise as creditors and owners; and divisions of the government. Statistics serve the same interests, providing factual information of a different type, but information no less valuable.

In serving business management, statistical techniques function in two related areas of which the first is the accumulation of factual material within an enterprise, and the second the accumulation of material outside the enterprise. Since the material collected within the enterprise is clearly different from that collected outside, the two areas can be discussed separately.

No business management can operate without a continuing flow of statistical information. Even small business concerns require some information, although the method of collection may be informal and the information itself not very complex. In larger concerns, and particularly in those corporations which operate several plants and sell throughout a large territory, a constant supply of statistical information is required for adequate control.

In the field of production, management needs statistical material to guide the purchase of raw materials. It is important to have current information about inventories of essential raw materials, about the rate of use of these raw materials, and about the length of time required to fill an order for more raw materials. Without information of this type, the production manager might find the plant overstocked with raw materials. At other times the stock might be diminished too far. At times factory operations might come to a temporary halt because of the complete disappearance

of the raw-material inventory. Inasmuch as it is one of the primary responsibilities of the factory manager to maintain inventories of raw materials at levels which will be adequate for the planned rate of production, with neither over- nor under-investment in inventory, the significance of these statistical reports is obvious.

Another interest of the factory manager will be in statistical information relating to the number of workers employed in the factory, the number of hours a week they work, and the rate of production per man-hour of factory labor. Information of this sort contributes to more efficient factory operation. It also aids the factory manager in securing and maintaining a close control over operations, so that he knows at all times what has happened in the field of labor and what is happening, and from this information is able to anticipate what will happen in the future.

In the field of marketing, as the Manatee Company case indicated, the man responsible for controlling operations relies upon a continuous supply of factual information. This is particularly true where the distribution problems cover a large geographical area, a number of salesmen, a complex line of products, and a variety of different types of customers — some purchasing in large amounts and others in small amounts. Here, too, without the information furnished by statistical records, management operates in the dark.

Two things should be noted about the accumulation of records within the business. These statistical records are an addition to the accounting records of the concern. The information they supply supplements that supplied by accounting records. The facts they describe are usually facts measured in units or men, not in dollars. Most of the dollar facts are recorded by the accounting system of the business. It is also important to observe that the correct use of statistics implies not only that these facts will be accumulated periodically, but that they will also be assembled by scientific routines and that they will then be analyzed, compared, and interpreted. The accumulation of records is not sufficient. Mountains of figures have no importance for the business manager unless he understands what they mean and how they may be used to assist him in the problems of controlling business enterprise.

The business manager is also interested in the collection of factual material from sources outside his own enterprise. This material may be related to the operation of other firms in the same industry. In this connection, the business manager will have a

great interest in comparing statistical tabulations of operations within his enterprise with similar tabulations of operations in competing enterprises. Many trade associations composed of the majority of the firms in various industries regularly secure the cooperation of their members in compiling statistics relating to operations. The contributing members then consult the statistical summaries to get a picture of operations in the industry as a whole. They also compare operations within their own concerns with average operations for the entire industry, discovering wherein individual concerns are doing unusually well or unusually poorly. The observation of points of poor performance may then contribute to attempts to improve performance with resulting increase in profits. In the field of retailing, for example, the Bureau of Business Research of the Harvard Graduate School of Business Administration has for many years compiled operating statistics for a large proportion of the department stores in the United States. These statistics are published annually in an elaborate report which is consulted by the contributing stores as a standard measure for appraising the relative efficiency of their own operation.

The business manager will have an interest not only in such reports of trade conditions or of operating efficiency in competing establishments, but also in statistical summaries relating to the general condition of business. There are few business concerns which are not directly affected by the general level of prosperity which prevails in the country. Statistical summaries of general business conditions and forecasts of conditions in the near future are used by business managers as guides in planning both production and distribution policies. The business man who is alert to the opportunities presented by such summaries will be interested in the picture of general business conditions in the entire country which such summaries present, and also in variations in different localities.

In the spring of 1941, for example, the rapid increase in spending for the national defense program led to the expansion of new industrial concerns in a great many parts of the country. The erection of factories and the institution of production on a large scale brought sudden prosperity to localities which had previously been depressed. It was important for sales managers of concerns selling products in general use to keep in close touch with the effects of the defense program in terms of sales opportunities in those areas where defense industries had been located. Frequent statistical

reports, some furnished by trade associations and by banks, others by local and state chambers of commerce, and still others by the many state and federal governmental agencies compiling statistics, were of great value to business men in guiding distribution policies through this difficult period.

Statistics Serve Creditors and Owners. As accounting reports are of interest to business managers, to creditors and owners, and to governmental agencies, so, too, are statistical reports. Investors appraising opportunities for placing their funds advantageously are interested not only in accounting reports of earnings over a period of years and of the current positions of various companies, as revealed by their published balance sheets, but also in the general prosperity of the industries concerned and in the business outlook for these industries. For information of this type, they will turn to factual material gathered by commercial statistical agencies. Particularly in forecasting future business trends do statistics offer a service to creditors and owners, supplementary to and equal in importance with the service of accounting records.

Statistics Serve Government. A number of government agencies have a continuing interest in statistics. It should be observed, in the first place, that the Federal government is the greatest single collector of statistical information in the country. Much of this information is digested and published and is available to business executives for their use in guiding the control of their enterprises. Other accumulations of statistics are of interest to governmental agencies and departments. The Federal Reserve Board, for example, which holds a general responsibility for guiding the financial affairs of the nation, relies to a large extent upon a variety of statistical summaries covering the state of business activity in various parts of the country, suggesting probable future developments, and contrasting the state of business in this country with developments in other parts of the world. Similarly, both the Treasury Department and the Department of Commerce have responsibilities with respect to financing government affairs, raising money through taxes, and counselling business men who depend to a large extent upon factual summaries available only through statistical techniques.

Perhaps the best single example of governmental and business use of statistical summaries is furnished by the United States census. A number of government divisions obviously have a keen interest

in the reports of the census. They watch closely population trends for the country as a whole, and comparative trends in various parts of the country, and in urban and agricultural regions. They also review the information in the census in their observation of trends into or out of the various industries, some of which may be growing while others are declining. Information of this type is essential to the wise guidance of the public services and for the protection of health and the provision of aid for the aged and the unemployed.

Business men also have a keen interest in the reports of the census. To those in charge of planning production it presents a broad picture of the population pattern of the country, which may serve as a basis for predicting the types of merchandise which will be desired. It has been observed recently, for example, that the rate of growth of the population of the United States is declining, and predictions are made that in the near future we may even come to a period when there will be no annual increase in the total population. The two major forces contributing to this result are, of course, the decline in immigration and the decline in the birth rate. One result will be a decline in the relative importance of children in the total population and an increase in the proportion of the aged. Local school committees will have to plan for a smaller enrollment in the primary and high-school grades in future decades, while the manufacturers of children's clothing, school equipment, textbooks, and similar merchandise may also expect a decline in the demand for their goods. The increasing importance of older people in the total population will also mean, for many business men, a change in the types of merchandise demanded. In this way, the bare population figures of the census can be used by business managers in planning future operations.

But the reports of the census are even more complex. They cover the distribution of business units in various industries and trades. They trace the rise and fall of different types of business enterprises, measuring, for example, the relative significance in retailing of chain stores and independent stores, or of large stores and small stores, or of department stores selling many types of merchandise and single-line stores which concentrate upon one type of merchandise.

The sales manager for a manufacturing concern will have a keen interest in the developing pattern of retail distribution. Part of his job involves planning marketing programs. He will want to

make certain that he is taking advantage of the rise of new types of retail outlets and that he is not continuing to sell his merchandise through a type of retail store which is declining in importance. Further examples could be cited by the hundreds. They all indicate clearly that the wheels of business are oiled by this constant flow of statistical information. Statistical information does not remove all the risks of management, but to the extent that it enables an executive to make his decisions more intelligently and with a clearer understanding of the conditions under which he must operate, it contributes to more efficient control of business enterprise, to larger profits, and to that greater consumer satisfaction which is the ultimate purpose of all economic activity.

STATISTICAL DATA

Statistical work begins with the collection of numerical data. The importance of doing this part of the work accurately and rationally cannot be overstressed. The interpretation of the ultimate results of accumulated numerical data depends directly upon the accuracy of the initial collection. It is a waste of time to attempt to interpret accumulated information unless one is certain that the information was collected reasonably and accurately, so that there are no distortions, inaccuracies, or misleading statements contained in the summaries.

Problems of Compilation. To build a foundation for the accurate collection of numerical data, it is important to start with three basic questions. No reliable information can be collected until the one in charge of accumulating the information is able to answer these three questions with no possible misinterpretation: First, what information is desired? Second, who wants the information? Third, for what purpose does he want the information?

In answering these fundamental questions it is necessary for the statistician to do the following things: (1) define the statistical problem; (2) list and evaluate all available sources of information; (3) determine what units of measurement should be used. These procedures will be described briefly in the following paragraphs.

In undertaking the examination of any statistical problem it is important to make certain that the limits of the problem are defined with absolute clarity. In setting up a statistical technique for examining factory working conditions, for example, the statistician must make clear what information he is seeking. Is he con-

cerned about wage rates in terms of dollars earned per week per worker? Is he concerned with wage rates in terms of dollars earned per hour per worker? Is he concerned with total wages earned by a typical worker during one week or one month or one year? Or, by way of contrast, is he concerned with output produced by each worker in a working week, in a day, in a year?

Unless the statistician understands exactly what information he is seeking, he runs the danger of being led astray into an investigation of parallel but unrelated material, and the business man who relies upon the statistician's work may misinterpret the results, simply because the initial investigation used the wrong information. The beginning of any statistical investigation, therefore, is a careful definition of exactly what information is sought.

Evaluation of Sources. Having determined the exact nature of the information desired, the next task is to canvass all available sources of information and to evaluate them in terms of their usefulness for the project being undertaken. In statistics, sources of information are customarily classified in two groups: (1) primary, and (2) secondary. Primary data are data gathered by original observation. Primary data are the facts gathered by the statistician as a result of an investigation undertaken under his own direction, an investigation which does not rely upon any material previously published in the field. Secondary data are facts compiled by others and usually available from published sources. To illustrate the contrast, we may cite as primary data those facts about salesmen's activities gathered by the statistician of the Manatee Company under the direction of the sales manager. If the sales manager had ordered the statistician to support his investigation with references from the Census of Distribution, showing the significance of various types of retail outlets in all parts of the country, material taken from census reports would be regarded as secondary data. Put in the simplest terms, primary data are facts collected for the first time in connection with the statistical problem being examined, while secondary data are facts taken from reports prepared in connection with other problems.

Primary and Secondary Data. Some statistical problems rely wholly upon primary data; other problems rely wholly upon secondary data; and many problems rely upon both primary and secondary data. The significance of classifying statistical material as primary or secondary can be readily seen when one notes that

the final results of a statistical investigation are no more reliable than the facts which form the basis for interpretation. The statistician is faced, therefore, with the problem of evaluating the reliability of the materials he proposes to use. It should not be suggested that primary data are always more reliable than secondary data, but it must be observed that not all types of secondary data are equally reliable.

The reports of the Bureau of the Census, or of other governmental divisions, may usually be accepted as the most reliable compilation of facts on the subject covered. Occasionally, however, reference is made to secondary data compiled by trade publications or by newspapers or trade associations. Secondary data of this type may be perfectly reliable, but some investigation by the statistician is warranted before he accepts these facts at their face value. The investigation should be concerned with discovering the accuracy of the methods of compiling the facts and the possibility of bias or prejudice, leading to distortion or misstatement of facts. Primary data may also be more or less reliable. In this case, however, the statistician usually will be in direct charge of the accumulation of the factual material and will be in a good position to certify the reliability of the facts and the trustworthiness of the method of compiling them.

Units of Measurement. It is also important for the statistician to determine exactly what units of measurement should be used in the particular problem with which he is concerned. Generally the best units of measurement are those which mean the same thing to all people. It is desirable, that is, to accumulate facts in terms of numerical units, or in terms of dollars, or in terms of standard measures of weight or distance. It is not desirable to accumulate facts in terms of comparatives or relatives. An investigation into the amount of rainfall in a given section of the country should make measurements in terms of inches of rainfall on various days, and should not compile statistics in such terms as "On Tuesday it rained a little bit, on Wednesday there was a heavy rain, and on Thursday the sun shone all day." An inquiry into consumer buying habits should seek to measure purchases in terms of the number of dollars spent each day in the week for groceries. It should not attempt to measure purchasing habits in terms of "I do most of my shopping on Wednesday and Saturday, and buy hardly any groceries on Tuesday or Friday."

The significance of making measurements in terms of absolute units which mean the same thing to all people can be readily seen when we realize that words of comparison or words which are used as relatives may mean different things to different people. What one person regards as a heavy downfall of rain, a second individual might look upon as merely a light shower. The accumulation of statistical information in these terms would be absolutely unreliable.

STATISTICAL TECHNIQUES

In the limited space of one chapter there can be no attempt to outline all the major statistical techniques or even to discuss in detail the actual operation of the most significant techniques. For extended discussion of this type the reader is referred to any of the standard textbooks on the subject. This chapter will attempt only a brief discussion of several of the simple basic statistical devices about which even business men untrained in advanced statistical methods must know something. A knowledge to this extent is necessary for an intelligent appraisal of many of the reports about business activity which appear in the daily newspapers, or for an understanding of the public-opinion polls which are employed so frequently to gauge the trend of popular thought.

Sampling. The first of these simple basic statistical techniques is sampling. Sampling is the technique of securing a reliable picture of a large group by an intensive inquiry into a small part of the group. Dr. George Gallup, director of the American Institute of Public Opinion, which periodically undertakes a sampling of the trend of popular thought on many public issues, has been able to secure reliable indications of public opinion on topics of national interest by questioning only a few thousand individuals. A business man whose products are sold throughout the country may obtain a reliable indication of consumer reaction to his merchandise by addressing his inquiry to a small sample out of the millions of consumers who are familiar with his merchandise. No one pretends that an inquiry based upon such sampling methods will be absolutely accurate. It will, however, be reasonably accurate if the sampling process is carefully supervised, and it will provide useful information at a relatively low investigation cost. The reliability of the sample increases as the size of the sample increases, but it is surprising with what accuracy opinions held by or facts drawn from a large number of people may be determined by a

careful sampling of the opinions held by or facts drawn from a small representative section of the larger group.

In using the sampling technique, one must observe the precaution of selecting a truly representative sample. Sampling is commonly carried on with one or the other of the following methods of selecting a representative group: (1) by random selection of items; (2) by conscious selection of items.

The theory underlying random selection suggests that every item in the large group (usually called the "universe") has the same chance of being included in the sample. The theory underlying conscious selection suggests that the universe under examination is subjected to careful analysis, that the major characteristics of the universe are noted, and that due representation is given in the sample to every significant division of the universe from which it is drawn. Thus, in selecting a sample of 5000 individuals to whom will be submitted a question of national significance, with the hope that the answers will truly reflect national opinion, representation must be given to people in all parts of the country, in cities, towns, and agricultural regions, in all economic classes from the highest to the lowest, in all age groups, with a division by sexes and political affiliations.

We may conclude that sampling by conscious selection will yield a more accurate picture of the universe from which the sample is drawn *provided that neither bias nor prejudice influence the selection of the sample.* Where information necessary for the conscious selection of a sample is lacking, random selection may be employed. If this is done, it is usually desirable to take several samples and compare one with another. Uniformity of results in several random samples may be accepted as reasonable proof that the samples are reliable.

Averages. When a large group of numbers is inspected it is often difficult to reach any important conclusions about their significance. A tabulation of daily temperature reports at Miami, Florida, does not, at first glance, lead to any conclusion about the climate of that city. A report of the number of automobiles produced every day by the Chevrolet plant will not make readily apparent any major conclusion about the rate of production. Some statistical technique is needed to reduce chaos to order and to simplify the task of interpreting collections of numerical data. One of the devices frequently used is that of computing averages.

An average number may be defined as a typical number. It is a number which represents the group from which the average is computed. It permits significant conclusions to be reached sbout the group. We understand something about the climate of Miami Beach if we read that the average winter temperature is 85 degrees. We understand something about the production of Chevrolets if we read a statement telling the average number of cars produced daily in a given month. Averages give an understandable picture of a group of figures and make possible comparisons with other groups, as between the average winter temperature at Miami Beach and the average winter temperature at Palm Springs. If we know the number of units produced daily by each of 500 workers in a factory we find it difficult to get any idea about the usual output of most of the workers. But if we are told the average daily ouput per worker, we immediately have a definite idea about output.

The business man must distinguish between at least three different types of averages: (1) the arithmetic average; (2) the mode; and (3) the median.

1. *The Arithmetic Average.* The arithmetic average is the sum of a group of figures divided by the number of units in the group. Thus, the average of the following numbers — 1, 6, 10, 2, 6 — is 5, calculated by adding the figures and dividing the sum, 25, by 5, the number of figures in the group. This is the simplest type of average, the one most frequently used, and the one commonly understood to be meant when no statement is made about the type of average under discussion.

It should also be observed that the simple arithmetic average may give undue weight to a few extremely large or extremely small numbers in the group. Suppose that student grades in two classes are distributed in the following fashion:

Class I	*Class II*
75	100
72	98
79	68
73	65
68	67
71	69
Average, 73	Average, 77.8

Although most of the grades in Class II are lower than most of the grades in Class I, the average of the grades in Class II is substantially higher than the average of the grades in Class I because of the presence in Class II of two very high grades.

2. *The Mode.* The "mode" is the term used to refer to the item which occurs most frequently in a series of numbers. It is the type of average which is often meant when, in casual conversation, people refer to average income or average salary. They have in mind not an exact calculation of the arithmetic average of all incomes or all salaries, but the typical income, in the sense of the income or the salary received by the greatest number of individuals.

To find the mode in a series of numbers, the numbers should be arranged in sequence with the highest at one end and the lowest at the other. The mode (sometimes called the "modal average") is that number which occurs most frequently in the series. The mode has the advantages of being easy to understand and of avoiding influence by extreme numbers at either end of the series. On the other hand, unlike the arithmetic average, it cannot be readily calculated.

3. *The Median.* The median is a position average found by arranging all the numbers in a group in order of size, counting them, and selecting the middle number. Thus, the median in a series has the same number of items above it as below it. It is easily selected if the number of items in a series is odd. If the number of items is even, the median may be calculated halfway between the two middle items.

The median is simple to understand and free from the influence of extreme numbers. On the other hand, if the number of items in the series is small, the median may not be truly representative of the group; and at no time can it be readily calculated.

The contrasting values of arithmetic average, mode, and median are clearly shown in the following table of student grades:

98	93	84	79	72
98	92	84	78	70
97	91	84	78	70
97	90	83	77	67
96	90	83	77	66
96	89	82	77	65
95	87	81	76	64
94	87	81	75	62
93	87	80	75	60
93	86	80	75	58
93	85	79	73	47

In this series of grades, the arithmetic average is 83, the median is 82, and there is a major mode at 93, with subsidiary modes at 87, 84, 77, and 75.

Weighted Averages. In computing a simple arithmetic average, every number in the group is regarded as of equal importance. In computing an average, however, the statistician will often recognize that the items vary in importance and may attempt to give adequate representation to that relative importance by multiplying each item by a suitable "weight" and dividing the total by the sum of the weights. The average computed in this way is known as a "weighted arithmetic average."

To illustrate this process, imagine the purchasing agent of a cereal-manufacturing company attempting to compute the average price paid for wheat during one week. Purchases have been made at the following prices per bushel: 83 cents, 84 cents, 86 cents, 87 cents, 88 cents, and 90 cents. The simple arithmetic average of these prices is 86⅓ cents per bushel. But varying amounts of wheat were purchased at different prices, and most of the wheat purchased was bought at prices between 83 cents and 86 cents per bushel. Actual purchases were as shown in the following table:

Price per Bushel	*No. of Bushels Purchased*
83¢	10,000
84¢	10,000
86¢	8,000
87¢	3,000
88¢	2,000
90¢	2,000

A weighted average, computed by multiplying the price paid per bushel by the number of bushels purchased at each price, adding the products and dividing by the total number of bushels purchased —

$$\frac{10{,}000\times 83¢+10{,}000\times 84¢+8{,}000\times 86¢+3{,}000\times 87¢+2{,}000\times 88¢+2{,}000\times 90¢}{10{,}000+10{,}000+8{,}000+3{,}000+2{,}000+2{,}000} =$$

$$\frac{\$29{,}750}{35{,}000 \text{ bu.}} = 85¢ \text{ per bu.}$$

indicates a price of 85 cents per bushel. An average computed in this way gives proper recognition to the relative importance of the several prices.

Index Numbers. A further complication of statistical measurement is introduced when business men attempt to compare eco-

nomic activity at different periods, or to measure such things as changes in the general price level, in the sales of merchandise by retail stores, or in the general level of wages in the steel industry. The device usually employed to make measurements of this type is the index number.

An index number may be described as a numerical measure indicating the relative movements of data. It is usually employed to measure the *general trend* of a complex group of data, making comparisons between the level of the data at one period (commonly called the "base period") and the levels at succeeding periods.

To illustrate the construction and use of index numbers, let us imagine that we are attempting to measure changes in the cost of food between 1935 and 1940. We might start with a list of perhaps 10 commodities which account for the principal food expenditures of consumers and list their prices in a selected store in 1935. The next step is to list prices of the same commodities in 1940. We may find that prices of some commodities have risen while prices of others have declined. This is, at first glance, confusing, because one purpose is to measure the general trend of food prices. What is needed is some single summary figure which will represent the balance between the increases and the decreases. An index number, calculated in the manner described below, may serve that purpose.

Let us begin by listing the commodities with their prices at the two dates selected:

Commodity	*1935 Price*	*1940 Price*
1	$0.33	$0.36
2	0.27	0.31
3	1.00	1.25
4	0.50	0.60
5	0.75	0.85
6	0.38	0.45
7	0.27	0.29
8	0.09	0.07
9	0.66	0.75
10	0.95	0.90
Total,	$5.20	$5.83

If we add the prices we find that the 10 commodities together cost $5.20 in 1935 and $5.83 in 1940. The relative increase in price in 1940 might be better expressed as a percentage of the 1935 price taken as the base. If we consider the total price in 1935, $5.20, as

equal to 100, then the 1940 price, $5.83, divided by the 1935 price will give the proportionate increase. We discover that the 1940 index is 112, if the 1935 price be taken as 100.

This is an example of a simple index number. It shows the percentage difference between a group of numbers at one time or place and a group of numbers at another time or place. More complex types of indexes are often calculated, but they represent only variations of the basic method.

Two of the most comprehensive and widely used series of index numbers are the Index of Wholesale Commodity Prices, prepared by the Bureau of Labor Statistics of the United States Department of Labor, and the Index of Industrial Production compiled by the Board of Governors of the Federal Reserve System.

The Index of Wholesale Commodity Prices is a comprehensive index designed to show changes in the general level of wholesale commodity prices. It is made up of price quotations for more than 700 commodities, each weighted according to its relative importance in the country's markets. The index numbers are expressed as percentages of the average prices in 1926 taken as equal to 100.

The Index of Industrial Production is a comprehensive index designed to measure the total volume of industrial production, expressed as percentages of the base period 1923–25 taken as equal to 100. Included in the Index are measures of productive activity in selected food products, fuels, iron and steel, leather products, nonferrous metals, paper and printing, rubber tires and tubes, textiles, tobacco products, automobiles, and others.

The business manager relies on index numbers more than on any other type of statistical device. They are used to measure every conceivable variety of business data covering general business conditions, production activity (both general and by industries and products), employment and wage payments, distribution (wholesale and retail sales, classified by types of establishments), prices, interest rates, and stock and bond prices. The indexes in common use are numbered in the hundreds.

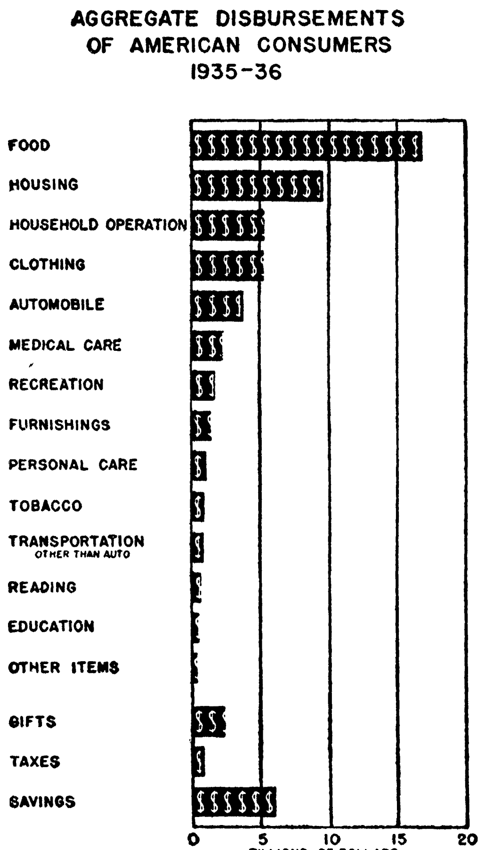
FLUCTUATIONS IN BUSINESS ACTIVITY

One of the common uses of index numbers occurs in recording fluctuations in general business activity. The business man is familiar with several types of fairly regular fluctuations in business

activity of which two significant varieties are commonly described as *seasonal fluctuations* and *cyclical fluctuations* (often referred to as the "business cycle").

1. *Seasonal Fluctuations.* Many industries experience regularly recurring seasonal fluctuations in sales. In the clothing business,

CHART 8. EXAMPLE OF BAR CHART

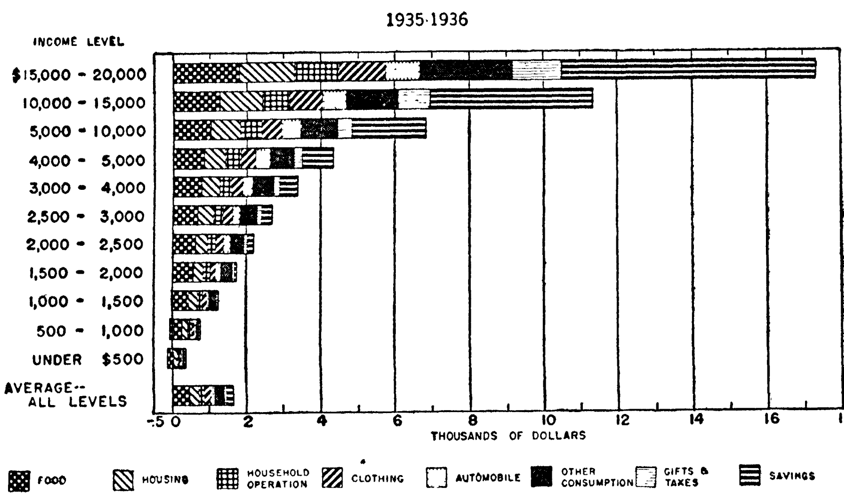


SOURCE: National Resources Committee, *Consumer Expenditures in the United States*, U. S. Government Printing Office, Washington, p. 4.

sales build up toward a peak at Easter, slump in the summer, and increase in the fall. General retail sales rise to a sharp peak during the Christmas season. Many manufacturers anticipate and plan for regular sales fluctuations which occur during the year because of the natural buying habits of consumers. Regularity in sales occurs, in fact, in very few industries.

Measurement of seasonal fluctuations by means of index numbers is a basic management technique. If fluctuations are regular and can be measured and anticipated, then the affairs of a business concern may be so administered that an orderly adaptation to variation can be secured. Anticipating seasonal sales fluctuations, the merchant may adjust his stocks of goods so as to be well supplied for peak consumer buying and not overstocked for the months of dull business. Anticipating seasonal sales fluctuations, the manufacturer can plan his raw material requirements, train the requisite working force, and plan the flow of goods through his plant.

CHART 9. EXAMPLE OF BAR CHART



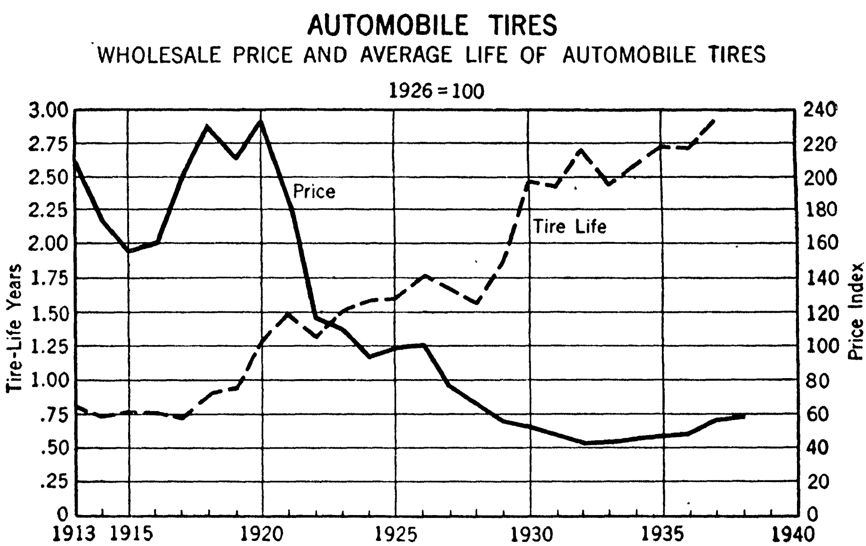
SOURCE: National Resources Committee, *Consumer Expenditures in the United States*, U. S. Government Printing Office, Washington, 1939, p. 19.

2. *Cyclical Fluctuations.* When business men refer to cyclical fluctuations, or the business cycle, however, they have in mind something quite different. They are thinking of a movement in general business activity covering a long period of time, a movement which affects all business concerns and every phase of economic life. Business men are aware that there are periods of good business, high profits, and general prosperity, and other periods of poor business, low or no profits, and general depression. They are aware that these periods seem to follow one another in regular progression. They speak of prosperities, booms, depressions, and

slumps. The typical experience is one of a growing prosperity that permeates all economic life, builds up to a climax of feverish activity, often terminates in a financial crisis, and is followed by a dragging depression when business activity experiences a progressive decline, until, finally, a new upturn takes place.

Fluctuations of this type can be readily measured by index numbers. Although there is no absolute mathematical regularity about the business cycle as measured by any or all of the many series of indexes of business activity, business men recognize a general coutour of fluctuations with each complete cycle lasting approximately 10 years.

CHART 10. EXAMPLE OF SIMPLE LINE CHART

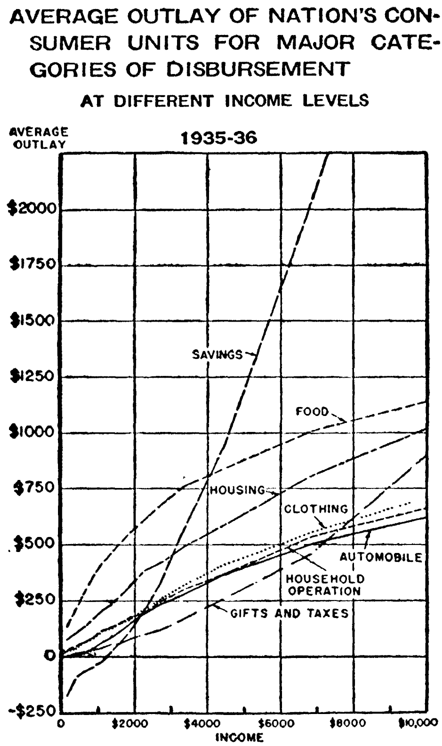


SOURCE: Temporary National Economic Committee, Monograph No. 1, *Price Behavior and Business Policy,* 1941, p. 65.

Many and complex forces have been analyzed by economists and business men to explain the occurrence of business cycles. We shall not concern ourselves with explanations at this point. It may be sufficient to indicate that the business cycle has been carefully analyzed and measured, and that the interest of business men in cycle measurement is justified by the pressure continually exerted on them to forecast the future trend of business activity. Many business decisions — the building of a new factory, the

expansion of a sales force, the renovation of a store — depend on an appraisal of the future outlook for business. A knowledge of cyclical fluctuations, although it will not make possible absolutely accurate prediction, will aid in framing a forecast closer to the shape of things to come.

CHART 11. EXAMPLE OF LINE CHART



SOURCE: National Resources Committee, *Consumer Expenditures in the United States*, U. S. Government Printing Office, Washington, 1939, p. 38.

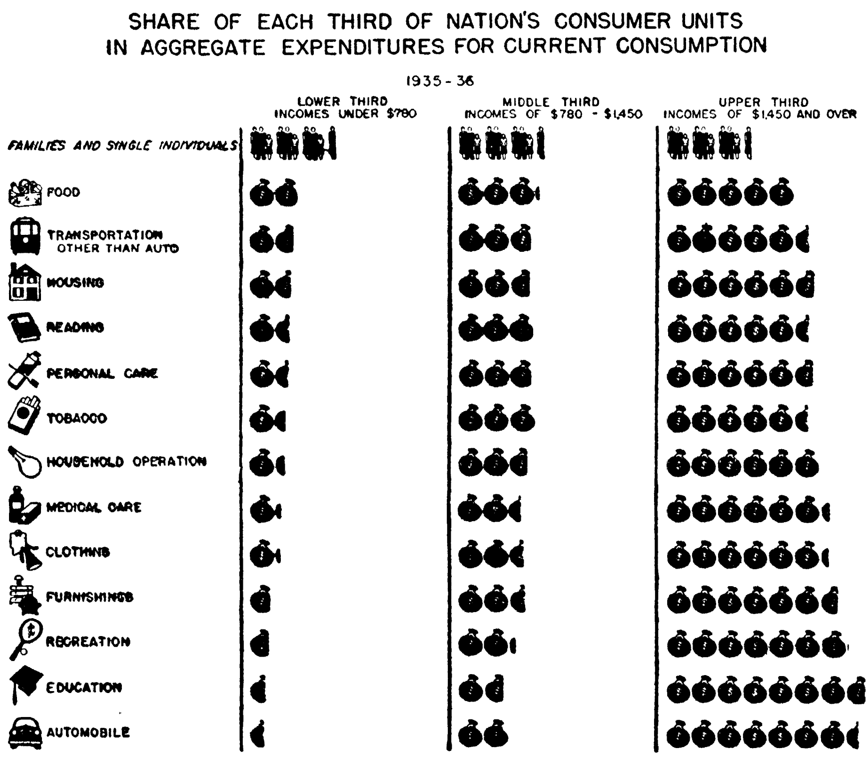
GRAPHIC PRESENTATION

Statistical information may be presented in two ways. It may be presented in numerical tables, or it may be presented pictorially in graphs. Increasingly, in recent years, compilers of statistical information have resorted to graphic presentation in order to transfer statistical ideas clearly and quickly to minds untrained in advanced technical methods. A numerical table may be difficult to interpret. A graph is a pictorial statement of fact which is

easily understood, at least so far as the principal points are concerned. Graphs are particularly useful in presenting summaries to men without the training necessary to interpret numerical tabulations, or without the requisite time or patience.

The general principles of graphic presentation can be summarized in the following terms. The best graph is the one which

CHART 12. EXAMPLE OF SYMBOL CHART



SOURCE: National Resources Committee, *Consumer Expenditures in the United States*, U. S. Government Printing Office, Washington, 1939, p. 9.

presents information in the simplest, clearest, most complete, and most truthful fashion. A graph must be so clear that there can be no doubt about the correct interpretation of the data. A graph must be complete enough so that every significant basic idea is given adequate representation. The omission of important facts may lead to serious distortion or misinterpretation.

Around these basic coordinating principles has been erected a science of graphic and pictorial representation of statistical data. To the business man, however, familiarity with the meaning of simple graphs and with the effectiveness of pictorial visual-presentation devices is sufficient. He finds many of the statistical summaries necessary for the control and guidance of his affairs available in graphic forms. When his interest is in the observation of trends, rather than in absolute and minutely accurate measurement, graphic or pictorial presentation may give him all the information he requires.

DEFINITIONS

Arithmetic average. An average obtained by dividing the sum of all the items by the number of items.

Cyclical fluctuation. Commonly referred to as the business cycle. The periodic recurrence of prosperity and depression in general business conditions, each phase commonly extending through several years.

Index number. A statistical device for showing relative changes in numerical values, commonly expressed as percentage variations from a selected base taken as 100 per cent.

Median. When numbers have been arranged in sequence from smallest to largest, the median is the figure which divides the list into two equal parts.

Mode. The number in a group of figures which occurs more often than any other number.

Sampling. Examining a representative portion of a large quantity of data.

Seasonal fluctuation. Regularly recurring monthly fluctuations in business activity common to many industries, but seldom exhibiting identical patterns of fluctuation in several industries.

Weighted average. An average computed by assigning a " weight " or multiplier to each component part in such a way as to reflect its significance.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What were some of the results of the statistical reports of the Manatee Company's research?
2. What are the functions of statistics?
3. In what two areas of facts do statistics serve business management?
4. Are there any phases of accounting in which statistics can be found useful?
5. Who is the greatest single collector of statistical information in the country?
6. Do the census reports give only population figures?
7. What are three questions which must be answered before collection of numerical data can be started?
8. What is the beginning step of any statistical investigation?

9. What is meant by "primary data" as contrasted with "secondary data"?
10. Why is it important to determine exactly the units of measurement to be used?
11. What is the theory underlying random selection? Conscious selection?
12. Explain what is meant by "arithmetic average," "mode," and "median."
13. What is an index number and what does it measure?
14. How can seasonal fluctuations of a business be measured? Cyclical fluctuations?
15. What are the general principles of graphic presentation?

B

1. Assume that you were appointed the new sales manager of the Manatee Company. Why would you find the six reports suggested helpful and how would you use the results discovered from the reports?
2. How do statistics of weekly sales for each department help the managers of a retail store to plan their purchases?
3. Can you explain any possible relationship between statistics and the English rules for composition?
4. Would our system of modern factory production be able to operate without the use of statistics as efficiently as they do now? Support your stand by concrete examples.
5. Of what value to the sales managers are the reports of their salesmen concerning the number of calls, the number of interviews, and the number of orders?
6. If you were a statistician and were instructed to prepare a report upon the potentialities of a new market, what would you do before starting the collection of any information? Why would you take these steps?
7. How can sampling methods be made more accurate?
8. Why would you find it desirable to use a weighted average in computing the average price of all automobiles sold in your home town for a period of one month?
9. Could statistics be used as an aid in smoothing out the seasonal fluctuations of unemployment for a manufacturing firm? Explain your answer.
10. Explain the relationship between index numbers and cyclical fluctuations and how business men can use it to their advantage.

C

1. Compute the median, the mode, and the arithmetic average of these figures. Why is there a difference in your results?
   92, 86, 66, 77, 80, 92, 81, 100, 98, 50, 35, 93, 92, 99, 76, 79, 65, 74, 73, 45, 100.
2. Prepare a brief statement of the relationship between statistics and accounting. Support your statement by concrete examples.
3. Assume that you are the owner of a plant manufacturing baby clothing. Would you be able to use the United States census reports in planning your work for the future? How?
4. Prepare a report upon one of the indexes of business activity. Explain of what items it consists, why these are used, what base is chosen, and the present position of business as compared with that of 10 years ago.

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CHAPTER 7

FIELD RESEARCH

A PROBLEM IN FIELD RESEARCH

Executives of the Flormaster Manufacturing Company[1] were considering the production of a new type of fountain pen with construction and shape unlike any other pen available to consumers. The pen had been developed by one of the company's officers and had immediately aroused the interest of other executives because of their desire to increase the variety of the company's products in order to stabilize factory operations throughout the year. The company had a successful record in the manufacture of a number of products sold to automobile manufacturers, but the executives were completely unfamiliar with the problems of manufacturing fountain pens and selling them to consumers. The officers of the company were anxious to broaden their sales opportunities and were, on the whole, favorably disposed toward undertaking the production of the pen, if it could be ascertained that a market existed.

Because of its unusual construction, the shape of the pen would differ from that of existing fountain pens. On a volume basis, costs of production would be extremely low, so that the pen could be sold profitably at a price as low as $2.00. The company's executives were uncertain, however, about consumer reaction to the unusual shape of the pen, about consumer attitudes toward fountain-pen prices, about consumer attitudes toward established brands of fountain pens and possible dissatisfaction therewith, and about consumer preferences with respect to the type of retail store in which they purchased pens.

A firm of marketing consultants was employed to conduct a program of field research designed to find out the answers to these questions. After surveying the situation, the consulting firm recommended that a total of 3000 consumer interviews be conducted to discover consumer attitudes toward and possible dissatisfactions with existing fountain pens, and preferences with respect

[1] Fictitious name.

to fountain-pen shapes, prices, and types of retail store in which purchases are made. It was recommended that interviews be scattered among various types of consumers, including a representative selection of college students, both men and women, business men, and housewives. The consulting firm recommended, in addition, that 300 interviews be scheduled with retailers of fountain pens, including bookstores, stationery stores, and drugstores, to discover their attitude toward the introduction of a new pen and their recommendations with respect to the retail price.

In interviewing consumers, questions would be asked designed to bring out consumer reactions toward existing brands of pens and possible attitudes toward a new brand. Consumers would be shown pictures of the new pen and, possibly, sample pens. On the basis of the pictures and the samples, consumers would be asked to estimate reasonable retail prices. Consumers would also be requested to state the type of retail store in which they preferred to purchase fountain pens, and the season of the year in which they usually purchased.

The executives of the Flormaster Manufacturing Company were told that, on the basis of the information developed through this field-research program, they would be able to reach a decision either to go ahead with production of the new pen or to drop the idea.

THE FUNCTION OF FIELD RESEARCH

Field research (often called "market research") is the third of the basic tools of business management concerned with the collection and organization of facts. Field research involves the study of markets and marketing methods. It involves the study of consumers, consumer buying habits, and consumer buying preferences. It involves the study of business organizations which are engaged in marketing. It involves, that is, a complete study of all the problems which may arise in connection with the sale of a product.

A primary function of field research is to replace guesses about markets with facts. It enables the management of a firm to control selling activities on the basis of knowledge about the conditions under which the company's products are being sold. It makes it possible, therefore, for management to plan sales

operations. Planning leads to control, and rational control is the foundation of scientific management in business.

Field Research Problems. The major problem of the business man in controlling the selling activities of his firm is to maintain a constant supply of information about the markets in which he sells

TABLE 3

QUESTIONNAIRE ADDRESSED TO RETAILERS IN MARKET SURVEY MADE FOR THE FLORMASTER MANUFACTURING COMPANY

State ....City or Town.................Date..................
Name of Store...... ....Kind of Store..............Position..............

1. What brands of fountain pens do you carry?.............................
....
2. Approximately what proportion of these are men's.......................
women's......................?
3. (a) What brand of pens is your best seller?.............................
(b) Why?...
4. What do you think determines the consumer's selection of a particular pen?
....
5. Which of the following colors in pens are your three best sellers? (Kindly mark best seller 1, second best 2, and next best 3)
( ) Blue ( ) Black
( ) Brown ( ) Green
( ) Combination
6. (a) What size of pen is your best seller?.............................
(b) Do the customers demand certain sizes? ( ) Yes ( ) No
(c) Do customers realize that there is more than one size of pen? ( ) Yes ( ) No
7. (a) Would you favor handling one brand of pen? ( ) Yes ( ) No
(b) If so, what pen should it be?.......................................
8. (a) In what months do you sell the most pens?..........................
(b) Which months are the poorest in pen sales?...........................
9. (a) At what times of the year do you buy your stock of pens?..............
(b) Do you buy all your pens at stated times or do you replenish your stock whenever you need to?
( ) At stated definite times ( ) Whenever necessary to replenish stock
10. (a) How many classes (prices) of pens are necessary for well-rounded stock?
....
(b) What are these prices?..
(c) How many pens in each class? (to give variety, etc.).................
....
11. (a) Have you any criticisms or ideas for improving pens? ( ) Yes ( ) No
(b) If so, what are they?..
12. (a) What is your personal preference in pens?...........................
....
(b) Why?...

his product. Information about the markets must be continually brought up to date, because it is a characteristic habit of consumers to change their preferences and tastes, to adapt ceaselessly to new styles, and to shift their purchasing routines continually. The marketing executive knows that the body of his customers is continually changing. It has been pointed out that over $2\frac{1}{2}$ million people are born in the United States every year, and that more than 25 million new customers are available for producers every 10 years. These customers are fully equipped with personal buying habits, desires, and preferences which are played upon by advertising and by the host of new products brought forward by inventors in an unceasing variety. Knowledge about markets today, is, therefore, no guarantee that there will be equally good knowledge about markets tomorrow.

TABLE 4

QUESTIONNAIRE ADDRESSED TO CONSUMERS IN MARKET SURVEY MADE FOR THE FLORMASTER MANUFACTURING COMPANY

1. Please select from these five sample pens the one you like best.
   1. ____________
   2. ____________
   3. ____________
   4. ____________
   5. ____________
2. When you buy a fountain pen, what price do you usually pay?..................
3. Do you now own a fountain pen?..
4. If so, what brand?..
5. Are you satisfied with it? ( ) Yes ( ) No
   1. Why?..
   2. Why not?..
6. What brands of pen have you seen advertised?
   1. ____________
   2. ____________
   3. ____________
   4. ____________
   5. ____________
7. Have you always used one brand?..
8. If you have changed brands, why did you change?..........................
   ....
9. Below are listed various considerations in the purchase of pens. Please rank these in the order of importance. (Mark the most important 1, the next 2, etc.)

( ) Price	( ) Shape
( ) Brand	( ) Ink capacity
( ) Color	( ) Point
( ) Design	( ) Durability

The task of maintaining a sound knowledge about consumer buying habits has been made more complex by the nature of the development of the American economic system. As giant factories have been erected producers have been forced to seek customers in territories increasingly distant from the producing point. The result has been that manufacturers have been compelled to sell their products at a distance to strangers. And yet, in order to plan production intelligently, manufacturers must understand a great deal about the desires, preferences, and buying habits of their customers. The manufacturer is separated from his customers, yet he must anticipate their desires. If he anticipates correctly, he will be able to produce merchandise which can be sold successfully at a profit. If he does not anticipate correctly, he runs the risk of producing merchandise which cannot be sold or which can be disposed of only at a loss. Unless the manufacturer, therefore, pursues a policy of continual field research and market analysis, he may find his products not wanted, his factory idle, and, eventually, himself out of business. Business men realize, therefore, that they can no longer depend on casual and unplanned impressions. They need facts.

Significance of Field Research. Business executives are becoming aware of the significance of field research. Most of the larger manufacturers in the United States sponsor as a regular part of their business a program of field research designed to furnish an unending flow of facts about markets. Not only are they concerned with securing facts about markets from day to day, they also try to secure information about prospective changes in consumer habits and preferences. The following quotation is from a letter addressed to his stockholders by Mr. Alfred P. Sloan, president of the General Motors Corporation in 1933:

> As a result of large-scale operations and world-wide distribution, producer and consumer have become more and more widely separated, so that the matter of keeping a business sensitively in tune with the requirements of the ultimate consumer becomes a matter of increasing importance.
>
> Through Consumer Research, General Motors aims to bridge this gap and provide guidance not only with reference to details of design, but as regards public relations, advertising, sales, service—in fact, everything affecting our customer relations, directly and indirectly.
>
> To discuss Consumer Research as a functional activity would give an erroneous impression. In its broad implications it is more in the nature of an operating philosophy which to be fully effective must extend through all phases of a busi-

ness—weighing every action from the standpoint of how it affects the goodwill of the institution, recognizing that the quickest way to profits—and the permanent assurance of such profits—is to serve the customer in ways in which the customer wants to be served.

The concluding sentence of Mr. Sloan's remarks underlines the heart of the function of field research. It may be accepted as a primary business principle that the focus of all business activity is the customer who buys merchandise, and that the easiest way to secure profits is to give that customer what he wants. The easiest way to guarantee giving customers what they want is to find out in advance of production everything which can possibly be discovered about their purchasing habits, merchandise preferences, and anticipated desires.

It should also be pointed out that continuous, intelligent, planned field research contributes greatly to simplifying the task of producing goods. It eliminates those wastes which arise from producing merchandise which consumers do not want It makes it possible for manufacturers to plan production further in advance of sales. It gives them the assurance that their financial and material commitments in production are going to result in merchandise which can be disposed of at a profit.

ORGANIZATIONS CARRYING ON FIELD RESEARCH

A great deal of field research is undertaken by the business concern which is directly interested in the results. Many of the larger manufacturers maintain divisions which concentrate solely upon the analysis of consumer markets and the business agencies which deal directly with those markets. Smaller concerns, however, often depend on outside specialists in field research who are available on a fee basis for individual projects. The smaller company may find that it requires this type of analysis only at intervals rather than as a regular part of its business. For such a concern it is not economical to maintain as a regular part of its business a division specializing in field research. Some of the larger concerns in the country may discover that while their own research divisions are adequate to carry on day-to-day routine market analysis work, they are too small adequately to supervise special jobs which may arise from time to time. In this situation, even the larger company will resort to consultants specializing in that work.

Field Research Specialists. The various types of organizations which specialize in conducting field research on a fee basis provide two distinct types of services. First, they maintain organizations prepared to carry on field investigations in all parts of the country and to do the actual task of interviewing, asking questions, and recording answers. Second, because of their experience in this type of work, they are prepared to offer counsel in interpreting the results of field research and in applying the conclusions reached from field research to the planning of manufacturing and selling. Because these organizations maintain a staff of experienced workers in all parts of the country, they are able to undertake field research at a low cost and with a minimum of time spent in preparation. They bring to the interpretation of the results of research a broad experience gained from contacts with many different fields of business and from the specialized problems of firms other than the one engaging their services.

Among the firms engaged in this type of work may be listed market-research and consulting organizations; advertising agencies which carry on field research as part of their broad services to advertisers; magazines, newspapers, and radio-broadcasting companies which engage in extensive research activity as a means of increasing the sale of their advertising facilities; trade associations; governmental agencies; universities; and educational foundations.

The business man who does not, as a regular part of his operations, maintain a field-research staff or engage in research activities is not cut off, therefore, from the possibility of using field research. There is available a variety of research agencies prepared to seek the information he needs and to interpret the results of that search in such a way that he understands the facts and is prepared to act upon them.

THE LIMITATIONS OF FIELD RESEARCH

It should be recognized that there is a clear distinction between the field-research activities we have been discussing and the type of research which scientists carry on in laboratories. It is the aim of the scientist to reach broad general conclusions which are universally true, on the basis of minute investigation of scientific phenomena. This may be regarded, perhaps, as the ultimate dream of the business man or the field-research director. It is unattainable in the economic world. Human beings cannot be

regarded as molecules of matter. Although we can discover a great deal about consumer buying habits, there is no guarantee that those buying habits will continue unchanged. Nor can we ever hope to reach through field research complete and universal truths about markets which will parallel the universal scientific truths of the order of the law of gravity or the movements of the planets.

The results of field research must be treated, therefore, as approximations of truths. This places a heavy burden upon the interpreters of facts gathered in field research. It makes it imperative for the business man employing field research to examine with a skeptical eye the results of questionnaires and investigations. And it makes it imperative also that he endeavor continually to supplement every research project with information gathered from all available sources which may throw light upon the facts secured from the field.

Types of Information Supplied by Field Research. The range of a business man's interest in his market is practically without limit. If he wants to approach scientific exactitude in the management of his affairs, he must extend his knowledge of markets as far as possible. One example of the extremely wide range of interest in the facts supplied by field research is suggested by the following outline, prepared by the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce. The outline covers those studies which should be undertaken by a manufacturer prior to making a capital investment in the production and marketing of a new consumer product. Not every manufacturer will undertake as extensive a research as the outline suggests, and yet some understanding of practically all these questions is essential. Most of these questions rely for a complete answer upon the extensive use of field-research activities.

1. THE MARKET:

   Who will use the new product? (What class of people?)
   What is the geographical location of the market? (Where are they located?)
   What is the income of the potential users of the new product?
   What areas contain the major part of the market?
   What is the growth projection of the market?
   What is the present consumption of comparative products?
   Will the new product go into export fields?

2. BUYING HABITS OF THE MARKET *Distributive Group*:

Who will buy the new product? (Wholesalers and retailers.)
What is the average number of people who must be contacted before the order can be closed?
What is the average time between first contact and sale?
What relative weight does the market give to quality, style, service, or other qualities of the new product, especially in relation to the merchandise which it will replace?
At what season is the buying done?
What are the market practices on discounts, allowances, billing, credit, or other financial factors?
What price can you expect the market to pay for the new product on the basis of current prices of comparative goods?

Ultimate Consumers:

Who will buy the new product?
What relative weight does the consumer give to quality, style, service, cost of operation of similar merchandise?
Is similar merchandise being sold on time payment?
At what season is the buying done?
What price can the consumer be expected to pay for the new product?

3. FIRM RELATION TO THE MARKET *Distributive Group*:

Is the firm name and reputation already established in the market?
Is the manufacturer's reputation, size, character of merchandise, or other quality susceptible to constructive exploitation in establishing the new market?

Consumer Group:

Is the name and reputation of the manufacturer already established in the consumers' mind in relation to:

a. Similar products?
b. Quality?
c. Dependability or other virtue?

Is the firm name or trade-mark susceptible to further exploitation among consumers?

4. COMPETITION:

What competition will the new product face?
What is the standing of competitive manufacturers with the market?
Will marketing the new product result in additional or keener competition on the regular line?
Can any competitor bring out a seriously competitive item quickly?

5. MANUFACTURER'S PRICE POLICY:

What in general will be the price policy on the new item?
Who will be entitled to discounts and allowances?
What will be the schedule of discounts and allowances to:

a. Exclusive distributors?
b. Wholesalers?
c. Retailers?
d. Other channels?

Will base price be the suggested resale or consumer price?
Will net prices be:

a. F.O.B. factory?
b. Local warehouse?
c. Delivered?

What will be the credit policy?
What new credit facilities will be needed?
What will be the collection policy?
What will the policy be on:

a. Return of goods?
b. Consignment of goods?
c. Order cancellations?
d. Damaged or unsatisfactory goods?

6. CHANNELS OF DISTRIBUTION:

What type of distribution will be used?

a. Factory sales branches?
b. Exclusive distributors?
c. General wholesalers?
d. Exclusive dealer?
e. Free dealer?
f. Factors — agents — brokers?
g. Direct to consumer?
h. Large department stores, mail order, chains only?
i. Any combination of these?

Where will service stocks be maintained?

a. Factory?
b. Branch warehouses?
c. Service warehouses?
d. Distributors, wholesalers, retailers?

If the new product is subject to export, what type of distribution will be used?

7. SALES PROMOTION:

Will the new product have its own sales-promotion set-up?
Will a new advertising section or department be needed?
Will a new or extended agency connection be needed?
Will distributors be aided with local advertising? Other sales-promotion aids?
What sales-promotion aids will be supplied to wholesalers? Retailers?
Will advertising and sales-promotion costs be shared by distributors?
Will there be organized publicity?
What in general are the sales practices of distributors for reselling the product?
What sales-promotion effort is being made by competitive manufacturers?
What will be the basis of the sales-promotion budget?

8. ORGANIZATION AND MANAGEMENT OF SALES FORCE:

Will a special sales staff or department be needed for the new product?
Will salesmen need special or technical training?
Will the entire sales force work from the home office?
How will territories and routeing be handled?
If sales are seasonal, will salesmen do missionary work between times?
What missionary selling will be needed for introductory purposes?
What sales-promotion aids will salesmen receive?
What will be the basis of salesmen's compensation?

9. OTHER FACTORS:

Is the new product patentable?
Is its trade-mark protected?
Are all claims to royalties or other indemnities settled?
Do royalties limit the market for the product?
Do codes and/or other trade agreements limit the market or the sales efforts?
Have local tax and other civil problems been solved?
Have all transportation problems been considered?

The outline clearly suggests the directions in which a manufacturer must extend his investigation either in considering the problems of selling a new product or in checking on the adequacy of selling methods used in distributing an established product. First, information is developed about the ultimate purchaser of the product. This information covers not only the number of actual or prospective purchasers and their location, but also their habits in buying. Investigation of buying habits includes such

questions as: In what stores are they accustomed to purchase this product? Do they ask for the product by brand name? Do they regularly buy one brand or do they switch brands? For what purpose do they buy the product? Are there other uses for which the product might be adapted? If so, are consumers aware of these uses?

The investigation into buying habits extends also to the whole· salers and retailers who help to forward the merchandise to ultimate consumers. This investigation covers such topics as: What types of wholesalers and retailers now sell the product? Do they sell competing products? How do the sales of this brand compare with sales of competing brands? What is the attitude of wholesalers and retailers toward this brand, with respect to price, quality, or service required?

The investigation must also secure information about competitors' products, the strength of their establishment in the market, and retailers' and consumers' satisfaction or dissatisfaction with competitors' products.

USES OF INFORMATION SUPPLIED BY FIELD RESEARCH

The accumulation of information of this type covering every phase of the prospective market for a new product or the actual market for an existing product enables the business man to extend his planning and his control on a scientific basis. In the case of an existing product, it helps him to discover if he is satisfying his customers. In the case of a new product, it helps him to plan the development of the merchandise in such a way that it will serve the needs and desires of consumers. It helps him to plan a marketing program which will bring merchandise to consumers as they want to buy it, at the price they prefer to pay, and in the retail outlets which they are accustomed to patronize. It enables merchandise, that is, to flow to consumers in the easiest, most attractive way, and it leads a business man directly toward his goal of complete consumer satisfaction.

Consumer Buying Habits. The uses of information of this type derived from field research are almost endless. In the case of established products, business men may find that a greater knowledge of consumers' buying habits will enable them to institute changes in the product, its package, or its price which will lead to a substantial increase in sales. The manufacturer of a

breakfast cereal, for example, may be conducting his business on the basis of a belief that children form the major market for the product. Careful questioning of consumers and retailers may disclose that adults make up a large part of the market. This, in turn, may lead to a change in the company's advertising which previously had been directed toward influencing children. The manufacturer of an automobile may be operating on the basis of a belief that men purchase cars. Careful market research may disclose that although men do the actual buying, women are important influences in the final selection of a car. This information may lead the manufacturer to change the essential nature of his advertising. Advertising directed to men may have stressed technical performance, quality of materials, efficiency in use; whereas advertising directed to women may emphasize the appearance of the car, style, or ease in handling.

Attitudes of Other Business Men and Agencies. Facts relating to wholesalers' and retailers' reactions toward a product may enable a manufacturer to initiate changes in his marketing practices which will create a more favorable attitude on the part of dealers. The manufacturer of a food product may have conducted his operations for years without being aware that his product was not being given adequate display in grocery stores. A research program designed to discover (1) how much display was being given to his product in grocery stores; (2) how much display was being given to competing products, and (3) how important display was in inducing sales of the product might result in a change in the manufacturer's display policy. If the manufacturer discovered that his product was given little display space and that display was important in inducing sales, he might undertake to produce attractive display stands on which the product might be set up before customers, and then encourage his salesmen to urge upon retailers the use of these display stands. The result of this changed policy might be a substantial increase in sales and profits.

Analysis of consumer use of a product may indicate that its sale has been restricted because many customers are unaware of the multitude of ways in which the product may be used. When the research program indicates (1) that the product may be used in many ways, and (2) that most customers use it in few ways, a change in the advertising copy designed to inform consumers about

new ways to use the product may be the basis for another substantial increase in sales. Examples of this type may be found in practically every industry and for practically every product which is sold.

FIELD-RESEARCH TECHNIQUES

As in the discussion of accounting and statistical techniques, no attempt will be made in this chapter to describe in detail how to conduct a program of field research or how to criticize and evaluate comparative working methods. For detailed technical descriptions the reader is directed to either of two volumes dealing with the techniques of market research.[1] The present discussion will be confined to a description of basic and generally accepted principles on which any sound field research must be founded. Research which does not follow the line of these principles may be subject to serious question and the results of such research should be carefully scrutinized. This much the business man who undertakes to use field-research studies must know, even if he does not carry on research himself and does not pretend to be a technician.

The first principle. The attitude of the director of field research must be that of a scientist. This means that the study is undertaken with an open mind, with a receptive attitude toward all facts, with no disposition toward a predetermined result, with neither bias nor prejudice. It means, also, that the director of research undertakes to guarantee the accurate recording of facts and to abide by their evidence, even when the results may be regarded as unfavorable to the project under consideration. The scientist attempts to find out; he does not attempt to prove. The scientific approach is rational, planned, objective, experimental. It does not start with a prejudice in favor of one result rather than another; it does not attempt to influence the experiment while it is in process; and it does not attempt to color the results or to distort or misinterpret their obvious meaning.

The second principle. Prior to the initiation of any field research or market analysis, the director of research must attain an absolutely clear understanding of the type of information which is wanted. This usually begins with a complete survey of all avail-

[1] American Marketing Association, *The Technique of Marketing Research*, McGraw-Hill Book Company, Inc., New York, 1937; Lyndon O. Brown, *Market Research and Analysis*, The Ronald Press Company, New York, 1937.

able information about the company undertaking the research, its products, its markets, and its relations with other business units. Next, the exact nature of the research program must be defined. What information is wanted? This should be reduced to crystal-clear statements. Not, "We want to find out something about consumer buying habits for our product," but, "We want to find out how many packages of our product are sold each week by chain groceries in Chicago." Or, "We want to find out the various ways in which housewives use walnuts."

The third principle. Prior to drawing up the formal program of research or deciding how it will be carried out or who will do it, an informal investigation should be made. The purpose of this preliminary informal investigation is to illuminate the areas of research, discover unforeseen difficulties, and get outside reaction to the research problem. This informal study can be carried on through conversations with consumers, retailers, and other business men. Information secured in this way may be helpful in determining the final research technique, and generally aids in seeing the problem in its proper perspective against the background of the company's business, its trade relations, and its customer good will.

The fourth principle. A formal written plan should be drawn up, describing in detail the technique of the research program. This written plan is to be the guide for the entire study, and should embody the combination of an exact understanding of the facts wanted, a general familiarity with the company background, an informal understanding of trade and customer relations, and a thorough experience with various field-research techniques. The plan should reduce to written form a statement of the purpose of the research, the types and source of data to be collected, the forms to be used by interviewers, questions to be asked, persons to undertake the field interviews, and operating costs for carrying on the research.

In connection with this plan, it is of particular importance to determine not only what data are sought, but where the data can best be found. Some facts can be secured only by questioning consumers. Others can be learned from business men dealing with the company undertaking the research. Some data can be secured from people who are not purchasers of the company's products. Some material can be secured through library refer-

ence sources rather than through field research. The best and most reliable source must be determined for all data. Often, it should be recognized, data from one source can be used to check the accuracy of material supplied by another source.

The fifth principle. The field research must be undertaken in the same scientific spirit which has guided the initial investigation of the problem and the construction of the plan of action. Interviewers must be carefully selected, trained in the technique of fact-gathering, directed to follow without deviation the printed instructions and interview forms, and to record answers and observations clearly and accurately. The interviewing work must be under supervision as a guarantee of its careful performance. Some review of the field research should be made as a check on the accuracy of tabulated results.

The sixth principle. Tabulation of the results of field research must be conscientiously performed and scrupulously accurate. This involves a careful examination of the primary records filed by interviewers to eliminate obvious errors and incomplete returns and to make certain that all data are consistent and uniform before the tabulation begins. The tabulation itself must be checked for accuracy and the results presented in the form of usable statistical summaries.

The seventh principle. The interpretation of statistical summaries of the results of field research must be based on the research alone. No new evidence should be introduced contrary to the evidence of planned research, nor should bias or prejudice color the obvious inferences of statistical evidence. Further, the interpretation should lead to specific and concrete recommendations for company action. The greater knowledge of consumers or market agencies should be the basis for action either to change the product, its price, its package; or to change the quantity or type of advertising, or the advertising message; or to change the system of selling the product; or, on the negative side, to refuse to follow a suggested course of action previously recommended, to test the merits of which the field research had been undertaken. Whatever the outcome, it is important that the results of research are not buried. The function of all research is to serve as the basis for intelligent business decisions.

The eighth principle. The results of field research, including a statement of interpretation and suggested course of action, must

be presented in such a way that business men without training in research techniques can readily follow the explanation of survey and results. Only in this way can business men appraise recommendations growing out of the research.

Not every program of field research will follow the exact detailed pattern outlined in the preceding discussion. Modifications and variations will often be introduced. Special business problems may require special research treatment. But the reader should observe that any serious departure from these basic principles is cause for a critical examination of results. The recommendations growing out of field research should not be accepted as reliable until the research technique itself has passed examination. Results are no better than the means by which they have been secured.

PROBLEMS IN PLANNING FIELD RESEARCH

Special problems often arise in the various phases of the research program, which require careful study by the business executive whether he undertakes such research personally or relies on the results of research carried on by others. Remembering that the results of field research are no more reliable than the planning and execution which produced the results, we may extend the discussion of problems back to those which arise in planning the work.

It is important to recognize that no uniform research technique can be observed in all investigations. For example, the director of research must bear in mind the various ways in which information can be secured. He can secure data by asking questions (sometimes called the "questionnaire method"). He can secure information by observation of existing conditions. He can secure data by controlled experiment. Each of these methods is adapted to special research situations demanding a particular type of information.

Questionnaires. If the questionnaire method is adopted, the director must take precautions to insure that truthful answers are offered by those interviewed. Because of a natural desire to impress strangers, people often reply to certain questions evasively or untruthfully. In the case of the Flormaster Manufacturing Company, cited at the opening of this chapter, the direct question, "Which of these two shapes do you prefer in a fountain pen?" (showing drawings or samples) would probably elicit an honest

and reliable answer. In another research project the question, "What magazines do you read every month?" would, in many cases, draw an answer indicating more extensive reading than actually occurs, or reading on a higher literary plane.

Questionnaire analysis must be carefully planned, therefore, so that the right questions are asked, with the expectation of truthful answers, with a minimum possibility of misinterpretation by the one interviewed, and without suggesting a desirable answer by the method of stating the question. Of these problems in planning a questionnaire, perhaps the most difficult is that of avoiding leading questions. One device frequently employed as a safeguard is to try out the questionnaire in experimental interviews before beginning the formal survey.

The questionnaire method may be used in personal interviews, in mail surveys, and in telephone surveys. The selection of methods depends upon such factors as the kind of information wanted (fact or opinion, long or short answers, etc.), the time available for the study, the number of interviews required, the length of the questionnaire, the type of people to be interviewed, and the area in which these people live. In all cases, the principles of sampling outlined in Chap. 6 must be observed.

Observation. If he undertakes to secure information by observation care must be exercised to insure accurate observation. Questionnaires may be answered dishonestly or on the basis of inadequate information. No screen of dishonesty or evasion comes between the observer and the behavior he is watching except his own ability to record accurately and completely.

With the observation technique a recorder may be stationed in a retail store to note the direction of customer traffic flow through the store, points at which customers paused to examine displays, and dead areas which attracted neither patronage nor interest. No questionnaire technique could be devised to secure this type of information. Under careful control, the observation method is well adapted to discover *what people do.* It does not penetrate the area indicated by the question, "Why do they do it?"

Experiment. The experimental method is the youngest of these fact-finding techniques. It is often used in such problems as that of determining varying sales volume at different prices. An article may be offered for sale at one price, and a record of purchases maintained. In another store, it may be offered at a

second price, with another record of purchases. Experimentation of this type may be applied to proposed changes in packaging, or to the measurement of sales resulting from various types of advertising.

The conditions of the experimental method correspond to, although they do not duplicate, the conditions surrounding an experiment in a scientific laboratory. An attempt is made to secure uniform conditions for each experiment. All factors relating to the experiment are carefully observed and recorded. The major difficulties encountered are those of maintaining uniform conditions outside the scientific laboratory.

PROBLEMS IN CARRYING ON FIELD RESEARCH

Once the research technique has been planned and the interviewers have been trained, the major problems arising in the actual operation of a field-research study center around the supervision of the interviewers and observers. Good interviewing consists largely in following instructions to the letter, maintaining absolute uniformity of interviewing technique, and recording answers and observations completely and accurately. The research director cannot depend on the observance of the necessary uniformity by scattered interviewers. The only valid guarantee lies in close supervision by trained observers, skilled in instructing others in the desired technique, thorough in checking on the reports of field interviewers.

The importance of devoting considerable attention to these problems is indicated by the fact that data gathered by interviewers or observers form the raw material of the research project. Conclusions based upon incomplete, dishonest, or misleading data are worthless. Such conclusions, in fact, are worse than worthless, because they may become the source of business action, piling error on top of error.

Difficulties of this character suggest the desirability, in many situations, of employing a research organization to undertake a field study, rather than attempting the study with the aid of an inexperienced staff hastily assembled and trained for a single project and then disbanded. Organizations specializing in field research maintain permanent staffs, trained in the techniques of interviewing and recording, under expert supervision.

PROBLEMS IN INTERPRETING THE RESULTS OF FIELD RESEARCH

Following the conclusion of the research and the tabulation of the results in the form of usable statistical summaries, the task of the analyst becomes that of interpreting the results and making recommendations for executive action. The interpretation of statistical summaries of the results of research depends on bringing experience, intelligence, and imagination to bear upon an assembly of facts.

The most difficult problems at this stage involve appraisal of the relative significance of the several phases of the research. Conflicts may be discovered between material from secondary sources uncovered by library research and the primary material secured through interviews or observation. Or there may be a lack of continuity between the general impressions secured in the preliminary informal survey and the statistical summaries based upon the formal research. The analyst must balance contradictory evidence and appraise relative significance. Up to this point the research program has depended little on opinion. The primary objective was scientific accuracy and the observance of tested techniques. Here, in the task of interpretation, experience and intelligence must determine the real meaning of the evidence, and intellectual integrity must insure every statement. Distortion of the evidence renders the entire program worthless.

ONE EXAMPLE OF ORGANIZED FIELD RESEARCH

To illustrate in some detail the operation of an organization actively at work in collecting data through field research, and the use to which business men may put the information, the following paragraphs describe the activities of the A. C. Nielsen Company.

The Nielsen research program is founded on the fact that in many lines of business (food and drugs are good examples), manufacturers do not sell direct to consumers, but to wholesalers, who in turn sell merchandise to retailers who sell to consumers. It is of prime importance to such a manufacturer to know how fast consumers are buying his product, because he is spending money for advertising and other promotional efforts and cannot direct those expenditures intelligently unless he knows how advertising

affects sales. Yet, because of seasonal sales fluctuations and because he is not in direct contact with consumers, the manufacturer may have no way of knowing what results in terms of sales to consumers follow each advertising or merchandising effort. He has a record of factory sales to wholesalers. But the record of goods shipped from the factory in any month may differ markedly from the volume of merchandise purchased by consumers.

A. C. Nielsen Company undertakes to provide those manufacturers who subscribe to their service a continuous record of consumer purchases of their products in 4000 typical chain and independent stores. The retail stores in the sample have been selected in such a manner that their sales represent a cross section of the sales of all stores selling food and drugs. Each territory in the country, cities in every major population group, stores in all size classifications, and each class of neighborhood (high income to low income), are represented in the sample in the proper proprotion. Stores included in the survey are located in 700 different cities and towns ranging from stores in the largest cities down to country stores at rural crossroads.

A. C. Nielsen Company contracts with each store for the privilege of counting merchandise on the shelves and checking invoices for all goods coming into the store. A trained, full-time staff is employed in this work. In the course of one year the field staff secures over 300 million items of information which are tabulated and interpreted.

The principal uses of this field research by manufacturers have been summarized in the following way:

1. To distribute advertising and merchandising effort correctly among various territories, city sizes, store sizes, seasons, and consumer income levels.
2. To separate the profitable from the unprofitable with respect to:
   a. Copy appeals in advertising.
   b. Quantity of advertising.
   c. Types of media used.
   d. Deals, combination offers, premiums, etc.
   e. Displays.
   f. Radio programs.
3. To detect marketing weaknesses and reveal the result of every effort to correct them.
4. To provide advance warnings of sales declines, competitive inroads, needs for changes in product, package, etc.

5. To reveal the causes of sales declines and point toward the remedies.
6. To detect gains or losses in dealer good will.
7. To determine the most profitable price levels.
8. To reduce the risk in marketing new products.

QUESTIONS, PROBLEMS, PROJECTS

A

1. Why were the officers of the Flormaster Manufacturing Company interested in market research?
2. What does field research involve?
3. How does field research serve as a method of control over selling activities?
4. Why is the job of maintaining a sound knowledge about consumer buying habits difficult?
5. What else are business executives concerned with besides securing facts about the market from day to day? How can field research help?
6. What is the best way to insure giving the consumer what he wants?
7. What two services do field-research specialists offer?
8. Distinguish between field research and laboratory research.
9. What should investigation of the term "buying habits" seek to disclose about consumers?
10. What type of an attitude should a director of field research assume?
11. Why should a formal written plan be drawn up and what should it include?
12. What part does tabulation play in field research?
13. What is the importance of proper presentation in field research?
14. What is one of the most difficult problems in the preparation of questionnaires?
15. How can the experimental method be used in field research?
16. What are some of the uses of field research such as that carried on by A. C. Nielsen Company?

B

1. Do you think that the retailer is qualified to answer question 4 in Table 3? Explain your answer.
2. Can you establish a relationship between field research and scientific management?
3. Explain the relationship between field research and the statement that more than 25 million new customers are available for producers every 10 years.
4. Why has the development of modern production techniques made field research more important to business concerns?
5. Why does Mr. Alfred P. Sloan place such an emphasis upon the statement: "to serve the customer in ways in which the customer wants to be served"?
6. How do field-research specialists serve business executives in an advisory capacity?
7. Why are the results of field research sometimes called "approximations of truths"?
8. Why does field research sometimes include a study of sales promotion?
9. How does field research aid the consumer?

10. Why must the exact nature of the research program be defined?
11. Why should the questions upon a questionnaire involve careful study?
12. What is meant by the "observation method" and what does it seek to discover?
13. What is the relationship between interpretation and close supervision of interviewers and observers?
14. As an official of General Foods Corporation, how would you find the services of A. C. Nielsen Company helpful to you?
15. Why do you think field research is helpful in the analysis of methods and means of distribution for manufacturing concerns?
16. Why must opinion and experience influence the interpretation of the results?

C

1. Write a brief essay upon the relationship which does or does not exist between field research and the statement, "Consumption is the goal of all economic endeavor."
2. Assume that you are a manufacturer interested in adding toothbrushes to your established line of cosmetics. What types of information would you desire from the consumers? Prepare a sample questionnaire that will enable you to obtain these facts. Suggestions upon the construction of questionnaires might be obtained from elementary texts upon market research or statistics.
3. Using the form suggested for consumer questionnaires for the Flormaster Manufacturing Company, secure 10 interviews. Analyze your results and prepare a short written report upon the facts as you interpret them.

SUGGESTED READING

American Marketing Association, *The Technique of Marketing Research*, McGraw-Hill Book Company, Inc., New York, 1937.

Brown, Lyndon O., *Market Research and Analysis*, The Ronald Press Company, New York, 1937.

CHAPTER 8

LIBRARY RESEARCH

THE FUNCTION OF LIBRARY RESEARCH

Library research is the fourth of the basic tools of business management employed in the collection and organization of facts. A good business library contains a multitude of printed collections of facts, general information, and opinion. It also contains a number of indexes which indicate in summary form where information is to be found and serve as short cuts in the fact-gathering process. The function of library research for the business man is to investigate collections of factual material, extract those facts which apply to specific business problems, summarize the facts in usable form, and interpret the summaries, so that they may serve as the basis of recommendations for executive action.

Library Research and Field Research. Library research may be regarded, therefore, as a partner of field research, supplying supplementary and supporting data. Whereas field research is directed toward the collection and organization of hitherto unrecorded data, library research is concerned with extracting pertinent material from the mass of recorded information.

Business executives depend upon both field research and library research. To illustrate this dependence let us again refer to the Flormaster Manufacturing Company, the executives of which were concerned with appraising the desirability of undertaking to produce a new type of fountain pen. Field research would supply information about consumer satisfaction with existing pens, buying habits, and price and style preferences. It would also supply information about dealer attitudes toward existing brands of pens, indicating the possibilities of entering the competitive market. Library research would supply information about the location of major consumer markets for pens, the number of consumers in various age, income, and occupational groups; the annual volume of fountain-pen business; trends in the industry; the number and location of retailers serving as outlets for fountain pens, and similar market data.

An Example of the Use of Library Research. The use of library data as the basis for executive action is outlined by the experience of a company which developed a technique for budgeting marketing expenses on the basis of library research.

The household product manufactured by this concern was sold in every part of the United States. For many years the company had advertised extensively in magazines. Its executives were considering the desirability of undertaking newspaper advertising in many of the major cities. One executive questioned whether the company was not already securing as high a sales volume as could be expected from some of the cities under consideration. If this were true, newspaper advertising should be confined to those cities in which sales volume was below normal expectations. In order to secure accurate information about the extent to which the company was realizing the full potential sales volume in the various cities, the executives directed the initiation of a research program.

The program was designed to measure potential consumer buying power (combination of willingness and ability to purchase goods) in various cities. The information necessary to demonstrate buying power was secured entirely from library sources in the following manner. Factual material was compiled relating to population, retail outlets, and the number of individuals paying federal income taxes. This information was accumulated for every city under consideration. The number of individuals paying income taxes was assumed to be a fair indication of the wealth of a city; the number of retail stores was assumed to be a fair measure of the business development of a city; and population statistics offered, of course, a measure of the size of a city. These three series of statistics were accumulated in a single index which was regarded as a measure of buying power for the various cities.

The construction of the index was carried out in the following way. If city A had 1 per cent of the total country's population, 1½ per cent of the total number of retail stores in the country, and 2 per cent of the total number of federal income-tax returns in the country, these three figures would be averaged and the resultant figure of 1½ per cent would be assumed to indicate that the city contained within its limits 1½ per cent of the total national buying power. Similar averages were computed for the other cities under consideration. The actual distribution of sales by the company

was then compared with the index measurement of potential buying power. If city A, as measured by the buying-power index, had $1\frac{1}{2}$ per cent of the national buying power, and if the company were making only 1 per cent of its total national sales in that city, that would be taken as an indication that the company was not securing its full share of the potential sales volume in that city.

On the basis of this comparison of actual distribution of sales with potential buying power, executives were able to come to a decision about the distribution of newspaper advertising. The ultimate decision was to advertise in newspapers in those cities where actual sales were less than the potential sales volume as measured by the buying-power index. In this way the executives of the company, through the use of material available in any good business library, were able to plan the distribution of advertising and to measure the relative effectiveness of the company's selling effort.

APPRAISING LIBRARY MATERIALS

Not all the information available in a business library is equally useful or equally reliable. Anyone undertaking to use library materials should not accept all printed information blindly, therefore, but should examine factual material thoroughly before using it. A trained librarian will, of course, be able to make a much more careful examination of the reliability of published material than will the business man or the student, but some general standards useful in appraising library materials may be cited.

Sources of Information. The most important consideration in appraising the reliability of published information is the organization which has gathered the material and arranged for its publication. There is an obvious contrast in reliability between information gathered and published by governmental divisions and that gathered and published by private sources. Governmental divisions in general may be assumed to be among the more reliable sources. Some private sources are thoroughly reliable, but others may have a special interest in the material published, and should be carefully investigated before their data is accepted. Special care should be exercised in determining whether published information represents facts gathered directly by the organization publishing the material, or material gathered by others and reprinted.

Appraising Collection Techniques. A second consideration is the technique employed in collecting material. If the material represents the result of a sampling process such as has been discussed in Chap. 6, the student should make an attempt to appraise the reliability of the sampling technique employed. In any case he should satisfy himself that the information was collected without bias or prejudice, and with no obvious attempt to introduce error or to omit significant facts.

Pertinent Data. Still a third consideration is the extent to which the published information applies to the problem which is being investigated. It is very easy to mistake the usefulness of published material. Information may appear to be related to a problem, while upon closer examination it may be discovered that the information is parallel to the problem, but does not exactly meet the point of issue.

Questions of this sort should be in the mind of the student or the business man using library materials. It is not always easy to make this kind of a check, but a skeptical attitude is a healthy one, since the use of misleading, incomplete, or biased information may lead to serious error in business decisions based upon published material.

THE USE OF A BUSINESS LIBRARY

Libraries are workshops. Books are the tools. A good worker must know how to use his tools well. Anyone who proposes to consult a library as a source of information must start with a general knowledge of how to use a library effectively.

Catalogue of Books. One starting point for an investigation of library resources on any subject is the catalogue of published books. The books collected in a library are usually listed on cards arranged in alphabetical sequence by authors, by book titles, and by subjects. Every book in a library has a series of symbols printed on the back, which are known collectively as the book's "call number." This number places the book at a definite point on the library shelves and makes it relatively simple to find the book whenever it is wanted. The call numbers are also recorded on the catalogue cards by author, title, and subject. In this way any title, subject, or author referred to in the card catalogue may be easily traced to a particular book on the library shelves. With this triple reference for every book, a student may consult the

catalogue files for a complete list of books by a single author, for a list of all books, pertaining to a single subject, or, if he knows merely the title, for the volume for which he is searching, regardless of the author's name.

The card catalogue serves as a basic source of reference for the student. It indicates the variety of books dealing with the topic in which he is interested, which are available in the library in which he is working. If his research is directed toward a particular author or a particular title, it indicates immediately whether the library owns the publication in which he is interested.

Reference Books. A second source of information for the student is the group of reference books available in the library. Reference books serve as starting points in library investigation, furnish specific information, and direct the student to other materials for more extensive discussion. Among the most important types of reference books are encyclopedias, almanacs, dictionaries, atlases, and bibliographies.

Encyclopedias contain authoritative, condensed articles covering the entire range of human knowledge, and usually include suggestive lists of books for further reading. An article in any good encyclopedia serves as an excellent general introduction to the topic under consideration. The accompanying bibliography functions as a check list or guide for more extended reading in the field.

Almanacs and atlases present condensed summaries of facts for quick reference. They are useful chiefly in checking isolated facts and verifying statements drawn from other sources.

Bibliographies are classified lists of publications dealing with a single subject. In a number of fields of general interest to business men bibliographies are available, which are brought up to date at frequent intervals. In addition, the Government Printing Office in Washington publishes public documents of both general and specific interest, reference to which is simplified by the issuance of catalogues describing and listing all public documents. In addition to these reference sources, there are available indexes of articles appearing in periodicals of all types.

The business man who undertakes extensive use of library materials will probably find it desirable to rely on a trained librarian for assistance in carrying on his investigation. For informal research, however, his own working knowledge of the major sources

of information available in the business division of most libraries may be sufficient. As an aid in conducting such an investigation, the balance of this chapter will be devoted to a selected annotated list of important books of reference. The list contains books of general reference and a selected group of references in each of several major fields of business. It is not intended to be complete, but rather to serve as a starting point for more intensive research.

SOURCES OF GENERAL INFORMATION

Dictionaries

Funk and Wagnall's Standard Dictionary. A convenient one-volume dictionary, including proper names, rules for simplified spelling, foreign words and phrases, statistics of population, meaning, pronunciation, and spelling.

Webster's New International Dictionary. An all-round dictionary, noted for clearness of definition. Includes dictionary, foreign phrases, abbreviations, proverbs, proper names, forms of address, and pronouncing gazetteer. Probably the most useful dictionary for general reference purposes.

Encyclopedias

Encyclopedia Americana. A good general encyclopedia with signed articles by specialists and numerous illustrations. Especially strong in science and technology. Annual supplement brings articles up to date and summarizes outstanding developments in the past year.

Encyclopedia Britannica. Best known and most widely used encyclopedia. The newest edition is the most useful for discussion of recent technological developments. The older editions are very scholarly and useful where recent information is not needed. Annual supplement.

Encyclopedia of the Social Sciences. Includes discussions of all the purely social sciences with the purpose of bringing out mutual relationships. Includes biographies of important contributors in each field. Excellent bibliographies appended to articles.

Handbooks

Who's Who in America. Directory of Americans in whom nearly everyone is interested; includes addresses and brief biographies.

Who's Who in Commerce and Industry. Biographical dictionary covering the most important executives in commerce and industry.

World Almanac. Annual publication which includes discussions of and statistics on legislation, population, postal information, famous people, weights and measures, political committees, United States government, religious information, and many topics of general interest. Alphabetical index in front of each volume. Best almanac of miscellaneous information.

INDEXES TO MATERIALS

Books

Library card catalogue.

United States Catalogue. Comprehensive listing of books and pamphlets published in the United States since 1899.

Cumulative Book Index. Forms an annual supplement to the *United States Catalogue.*

Periodicals

Industrial Arts Index. A subject index for articles published in a selected list of business, engineering, and trade periodicals. Follows the same plan of indexing as the *Readers' Guide to Periodical Literature,* although articles are indexed by subject only. Published monthly, cumulating through the year, ending with annual volume in December.

International Index to Periodicals. Contains author and subject index similar to the *Readers' Guide,* but covers periodicals of a more scholarly nature.

New York Times Index. Monthly and annual publication. Classifies by subject matter all articles appearing in that newspaper, with references to issues, pages, and columns.

Public Affairs Information Service. A combination of a subject index to the current literature in its field and a digest of recent events and developments in the fields of sociology, political science, and economics, particularly the practical sides of these subjects. Includes records of new legislation, notices of approaching conferences, meetings, etc. Published weekly, bimonthly, cumulations, permanent annual volume.

Readers' Guide to Periodical Literature. An index to magazine articles on general subjects, featuring: full cataloguing of all articles under author, subject, and title; use of catalogue subject headings; full information in the references. Published monthly, cumulated quarterly, semi-annually, and annually.

Government Publications

Boyd, Anne, *Guide to Government Publications.* List of all important publications issued by departments of the government.

U. S. Superintendent of Documents, *Monthly Catalogue of Useful Public Documents.* A current bibliography of all publications issued by all branches of the government, including congressional, departmental, and bureau publications. Each number contains: general instructions for ordering documents; preface noting noteworthy documents of the month; list of documents published during the month, arranged by departments. Detailed author and subject index.

U. S. Superintendent of Documents, *Weekly List of Selected U. S. Government Publications.* Supplementary to the *Monthly Catalogue.*

GENERAL BUSINESS INFORMATION

Government Publications. Publications of the Federal government probably supply the largest and most useful collection of material for the business man. Through the activities of many government departments and bureaus, aided by the cooperation of trade associations and other private fact-collecting agencies, an array of cumulative and current information is made available. This information is not confined to public affairs or even to that middle ground where governmental and private-business activities meet. It provides, in many areas of business activity, the most comprehensive review of private-business activity.

Although the reports of hundreds of departments and bureaus may contribute to the solution of specialized research problems, the publications of these departments are of outstanding interest for the business man: Agriculture, Commerce, and Labor. The Department of Commerce was established for the specific purpose of serving the needs of the business community. Publications of the Bureau of the Census and the Bureau of Foreign and Domestic Commerce contain probably the most significant and valuable statistical summaries to be found in any collection of business information. In addition to the many publications of the Department of Agriculture dealing with scientific developments in farming, others cover the formation, growth, and administration of agricultural cooperative associations; current marketing of farm products; price trends for agricultural products; and similar material. Within the Department of Labor, the Bureau of Labor Statistics compiles price indexes and publishes a wide variety of labor facts both currently and summarized for calendar periods. The series of volumes published by the Temporary National Economic Committee, based upon extensive public hearings, present a striking accumulation of material on aspects of the economy at work, illuminating areas hitherto unstudied.

U. S. Department of Agriculture, *Agricultural Yearbook.* Includes series of articles on agricultural developments, problems, and recent trends, statistical material relating to the output and value of all classes of crops, acreage planted and harvested, and comparisons of crop forecasts with actual yield.

U. S. Bureau of the Census, *Census of the United States.* Index of occupations, manufacturers, financial statistics of states, cities, state and local

governments, heads of families, history and condition of newspaper press, statistical atlas, etc. Principal series of reports cover agriculture, distribution, manufactures, population, and unemployment.

Census of Business. Classifies on a geographical basis all retail, wholesale, and other distributive channels in the marketing process. These, in turn, are classified into type of outlets, classes of business, or kinds of products sold.

Census of Manufactures. Collection of statistical data of groups of industries, such as food and kindred products, textiles, forest products, paper and allied products, printing, publications, and allied industries, etc. Published biennially by the U. S. Government Printing Office.

U. S. Bureau of Foreign and Domestic Commerce, *Commerce Yearbook.* Detailed information on business conditions in the U. S., incorporating summaries and analysis of statistical information originally collected by government bureaus, trade associations, and trade journals, with references to sources of information.

U. S. Department of Agriculture, *Crops and Markets.* Provides data relating to the production, movement, and prices of farm products, and presents forecasts of crop prospects.

U. S. Bureau of Foreign and Domestic Commerce, *Domestic Commerce.* Presents new information on marketing prepared by all government and nongovernment organizations, including census releases, important legislation affecting markets or prices, reports on Federal Trade Commission activities.

Federal Reserve Board, and U. S. Department of Commerce, *Survey of Current Business. Federal Reserve Bulletin.* Contain general summary data pertaining to the trend of economic conditions. Present a picture of the business situation by setting forth facts regarding bank and financial developments as well as current statistics for various lines of trade and industry.

Bureau of Foreign and Domestic Commerce, *Market Research Sources.* Guide to information on domestic marketing. Lists recent publications on marketing and indicates American organizations, firms, etc., which are doing research work in the subject.

Bureau of Labor Statistics, *Monthly Labor Review.* Excellent source of current information on retail and wholesale prices, wage levels, conditions of employment, and matters in general relating to labor.

Private Publications. A number of private agencies publish summaries of current business developments and interpretations of trends. Among those whose reports are commonly found in business libraries are the following: Babson's Reports, Inc.; Brookmire Economic Service; Dun and Bradstreet, Inc.; Harvard Economic Service; and Standard Statistics Service. Further summary, comment and interpretation will be found in such current periodicals as

Barron's *Commercial and Financial Chronicle*, *Dun's Review*, *Dun's Statistical Review*, *Harvard Business Review*, and newspapers such as *Journal of Commerce* and *The Wall Street Journal*. Several of the larger banks publish periodical business reviews. In this group may be listed the *Monthly Review* of the Federal Reserve Bank of New York, and the publications of the Chase National Bank, The National City Bank, and the Cleveland Trust Company.

SPECIALIZED BUSINESS INFORMATION

Many of the publications and services listed in the preceding pages provide material valuable in the study of specialized fields of business. In addition, the business man may refer to the sources listed below.

ACCOUNTING

Accountant's Index. Reference to books and periodicals dealing with accounting.

BANKING, CREDIT, AND FINANCE

Dun and Bradstreet, Inc. Compiles credit information for subscribers to services.

Moody, *Manual of Investments.* Covers broad field of finance. Contains general investment information, including history of enterprises, current and past financial statements, listing of directors and offices. Covers industrial concerns, public utilities, banks, governmental divisions.

New York Stock Exchange Listing Statements. Includes corporation charters, financial statements, and other information about companies listed on the New York Stock Exchange.

Standard Statistics Service. File cards and loose-leaf records covering financial and earnings statements, dividend policies, debt maturities, outstanding securities, and similar information.

MARKETING

Market Data Handbook. U. S. Bureau of Foreign and Domestic Commerce.

Other Specialized Fields. Further valuable material is collected by trade associations formed by enterprises in various lines of business. Trade associations collect data which is made available to members and frequently published. Among the trade associations doing outstanding work in the collection and publication of data in specialized fields may be listed the American Iron and Steel Institute, the American Petroleum Institute, The Automobile Man-

ufacturers Association, The Cotton Textile Institute, and The National Retail Dry Goods Association.

Trade papers are published for almost every specialized type of business and many of these weekly or monthly magazines are good reference sources in their fields. Further assistance may be found in the special research studies issued by bureaus of business research in a number of the leading colleges and universities.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What is the function of library research for the business man?
2. Explain the term "potential consumer buying power."
3. What is the most important consideration in appraising the reliability of published information?
4. What should be the first step in the investigation of library resources?
5. What are reference books?
6. What types of information are generally found in almanacs and atlases?
7. What kinds of information are obtainable from the following:
   a. Encyclopedia Britannica?
   b. Encyclopedia of the Social Sciences?
   c. Who's Who in America?
   d. World Almanac?
8. Of what value are the *Public Affairs Information Service* and the *Readers' Guide to Periodical Literature?*
9. What three departments of the government publish material which is especially helpful to business men?
10. Name three private agencies which publish summaries of current business developments and interpretations of trends.

B

1. Why do you think library research is so essential to the collection and organization of facts?
2. As an executive of the Flormaster Manufacturing Company, what information would you desire from the business library in regard to the marketing of the fountain pen?
3. How was the index of buying power constructed by the manufacturer of the household product discussed in this chapter? Do you think that the three series of statistics used were the best items that could be used in making up this index? Would you advise the use of any other series as substitutes or additions to the index? Support your stand.
4. Why are private sources of information not always reliable?
5. What are three general sources of materials from which you might obtain information concerning the methods of training salesmen?

6. Why do you believe the publications of the Federal government are said to provide the most comprehensive review of private-business activity?
7. If you wished to secure financial statements of several large industrial concerns, where would you find them in a library?
8. Why is library research an essential supplement to field research?
9. Explain what is meant by the "Library of Congress" and the "Dewey" systems of classifications.

C

1. Secure from the library data about the county in which you live, which give some indication of the market which exists there. Such items as total population, total income, number of income-tax returns, number of farms, number of manufacturing plants, number of retail stores, total retail sales, and other related items might prove helpful. Two suggested sources would be the *Consumers' Market Data Handbook* and the *Census of Business* reports. Bring your facts to class and be prepared to explain why you picked the items that you did as indicators of the market.
2. Prepare a short written report upon the general type of material which is obtainable from the *Census of Business* reports.
3. Find several articles in current periodicals concerning:
   a. Business taxation.
   b. Consumers' cooperatives.
   c. Methods of market research.
   d. Labor unions.
   e. Packaging.
   e. Government regulation of prices.
4. Prepare a report upon the number and types of industries in your home county. Indicate the sources you used in finding this information.
5. Prepare a bibliography on a topic of your own selection, indicating references you have consulted in the card catalogue.

SUGGESTED READING

Committee on Research of the Amos Tuck School of Administration and Finance, Dartmouth College, *Manual on Research and Reports*, McGraw-Hill Book Company, Inc., New York, 1937.

Spahr, W. E., and R. J. Swenson, *Methods and Status of Scientific Research*, Harper & Brothers, New York, 1930, Chaps. II, VII, VIII, X, XI, XVIII.

CHAPTER 9

THE ORGANIZATION OF BUSINESS OWNERSHIP

A PROBLEM IN ORGANIZATION

Richard Saunders and George Johnson were interested in going into business in their home town, and decided to open a grocery store. They had saved $700, but needed $1200 more to buy the necessary store equipment and merchandise. Saunders had a wealthy uncle who agreed to lend the boys the required $1200, but was not interested in helping to manage the store. He encouraged the young men by pointing out that the town was growing rapidly and that future earning prospects for the store were exceptionally promising. Having worked out the preliminary plans, Saunders and Johnson were confronted with the problem of choosing a form of organization for the enterprise. Saunders was in favor of organizing the store as a partnership. Johnson insisted that it would be better to organize the business as a corporation. Saunders suggested to his uncle that he become a partner in the enterprise, but his uncle refused, stating that he was willing to lend the money to them if they insisted on forming a partnership, but that he preferred to become a part owner in a corporation. He recommended that they consider very carefully the prospective advantages and disadvantages of every form of organization before making up their minds. His attitude came as a great surprise to Saunders and Johnson who had never paid much attention to the significance of the differences in the forms of ownership organization.

THE FUNCTION OF BUSINESS ORGANIZATION

The problems facing Saunders and Johnson in deciding on a suitable form of ownership organization for their grocery business confront every business man and every group of business men contemplating the start of a business enterprise. There are various ways in which the ownership of enterprises may be organized. They differ from each other in the division of risks, the division of profits, and the division of control. No one form of organization is satisfactory for every type and every size of business. Every form

of organization has certain advantages and certain disadvantages, many of which can be described only in terms of the particular individuals planning a particular enterprise, their money, their desire to share control, risk, and profit, and the size of the enterprise they expect to undertake.

Let us begin by describing ownership organization as a tool of business management used in defining and limiting the mutual relations of the owners of business. It defines their mutual duties, privileges, and responsibilities; their respective share in risks, profits, and control; and their obligations to other business men and to the government. As the business tools described in the preceding chapters are essentially devices for collecting and organizing facts, ownership organization is a device for collecting and organizing capital, and particularly for setting forth with absolute clarity the financial relationships of the owners of business.

We shall proceed in this and the following chapter to describe the principal characteristics of various forms of business organization, from the individual proprietorship to the corporation. The student should bear in mind that this simplification of analysis is undertaken in the effort to distinguish one form of organization from another. He should not be misled into the belief that the various forms of organization can be sharply defined on every point, or that they have no characteristics in common. One form merges into another.

One should also observe that the forms of business organization are not legally determined in an absolutely rigid manner. Organizational forms have been developed to serve the needs of various types of business activity. It is the form which is adapted to the business need, not the business which is adapted to an existing form. The forms of organization are flexible. They have changed during the long history of business and they are changing today.

FACTORS INFLUENCING THE SELECTION OF A FORM OF ORGANIZATION

On what basis do business men decide between the various forms of business organization? What factors should Richard Saunders and George Johnson have considered in selecting an organization for their grocery business? Whether or not the following questions are given explicit statement in the plans for an enterprise, they will

undoubtedly be the major considerations in the minds of those who are faced with the problem of selecting a form of ownership organization for a new business. For any given form of business organization these questions may be raised:

1. How easy is it to organize?
2. How easy is it to raise money?
3. What is the liability of the owners for the debts of the business? For the debts of one another?
4. How easy is it to define management authority?
5. How easy is it to transfer ownership?
6. How easy is it to expand the size of the business?
7. How easy is it to expand the geographic area in which the business may lawfully operate?
8. How easy is it to change the nature of the business activity?
9. To what extent is it under the control of government?
10. To what extent is it subject to taxation?

1. *Ease of Organization.* Types of organization differ in ease of formation. Some types require no special safeguards, while others often involve complex and expensive legal proceedings. Those which are more difficult to form may have to be organized in accordance with state laws which often vary between states. This necessitates expensive legal assistance in drawing up organization papers, and may delay organization for a considerable period.

2. *Ease of Raising Money.* Some types of organization are especially adapted to the requirements of a small enterprise which can be entirely financed by the contribution of one or two investors. But the large enterprise often requires a subscription of capital beyond the means of a small group of men. A special form of organization may be required to enable ownership rights to be parceled out among a large group of investors so that money pooled from many sources may be devoted to a single business enterprise.

3. *Liability for Debts.* In appraising a proposed enterprise, investors balance opportunity for profit against risk of loss. Business organization forms differ in their treatment of the risk of loss. In some forms of organization, the investor may lose not only the money he has invested, but part of his personal property as well, which may be claimed by creditors if the assets of the enterprise are not sufficient to satisfy legal claims against them. In these types of organization the heightened risk must be balanced by unusual

profit opportunities, and, in many cases, it will be difficult to attract capital.

4. *Definition of Management Authority.* In some types of organization authority may be placed with a single person. This definitely limits the scope of business activities which may be attempted. In other organization forms, actions taken by any one of a number of officers may be binding upon the others and upon the business as a whole. Still another type of organization permits absolute definition of the limits of authority of every officer. Considerations such as these may make one form of organization more attractive to management, another form to investors, and may decisively influence the selection of associates in management.

5. *Transfer of Ownership.* Some forms of organization may be abruptly and unexpectedly terminated, while others have continuous existence beyond the lifetime of any individuals associated with them. Such continuity, or the lack of it, is a significant consideration to both investors and business enterprises contemplating relations with the concern. The possibility of an unanticipated dissolution of an organization adds to the long list of risks which make every business transaction a hazard of fortune and an economic adventure.

6. *Expanding the Size of the Enterprise.* It is impossible to forecast the future growth of a new business enterprise. Nevertheless, it is desirable, whenever possible, to select a form of organization which will permit growth in the scale of operations without a complete reorganization of the business. The ease of making this provision varies with the form of organization. For some types of organization, expansion is encumbered with legal obstacles which impede freedom of action and delay necessary executive decisions; for others, expansion is easy.

7. *Expanding the Area of the Enterprise.* Similar difficulties may arise in connection with the extension of activities throughout a wider geographical area. With some forms of organization this may proceed without hindrance or interruption; with others legal requirements must be satisfied which may delay, endanger, or even, in some cases, prevent such extension.

8. *Changing the Nature of Business Activity.* Occasionally, because of invention or a switch in consumer habits, it may be necessary to change the whole nature of a firm's activity, perhaps, indeed, to abandon past operations and undertake the manufacture of a

wholly new product or to shift from one type of business to another. Some forms of business organization present no obstacles to such an adaptation; others may absolutely prevent it, forcing the dissolution of the enterprise and the formation of a new organization. These considerations of flexibility are important to present owners and to prospective investors and should, therefore, be examined in connection with problems of raising the money necessary to support the enterprise.

9. *Government Control of the Enterprise.* As has been suggested in section 1, state and federal governmental bodies exercise a considerable measure of control over business enterprises. Some types of organization are closely supervised, others are subject to only a slight measure of supervision. The extent of this control, its restrictive pressures, and the delays and encumbrances which flow from it are often important considerations in selecting a type of organization for a new enterprise.

10. *The Incidence of Taxation.* All forms of business organization are not taxed in the same way or to the same extent. Since taxes are an increasingly significant item in the total cost of doing business, their relative impact on the several types of organization may be a factor in the selection of an organization form for a new enterprise.

It should be observed that appraisal of the 10 considerations discussed above will not lead unerringly to the selection of a specific organizational form. Some factors may indicate one type of organization, some another, and the final choice is usually a compromise between desired and contrasting ends. With this in mind, let us examine the different ways in which an enterprise may be organized. For each form of ownership organization an attempt will be made to note contrasting advantages and disadvantages. The three most important forms of ownership organization are the individual proprietorship, the general partnership, and the corporation. Among the less important forms may be cited the limited partnership, the syndicate or joint venture, and the common law or Massachusetts trust.

In the following description of the leading forms of business organization, it should be observed that the legal framework, in its influence in stabilizing business relationships, attempts to define three distinct relationships: (1) the relations of the owners of an enterprise to one another; (2) the relations of the owners and the

3. Sketch a general history of the development of the general partnership; of the limited partnership.

SUGGESTED READING

Donaldson, E. F., *Business Organization and Procedure*, McGraw-Hill Book Company, Inc., New York, 1938, Chaps. 3–7.

Temporary National Economic Committee, Monograph No. 17, *Problems of Small Business*, U. S. Government Printing Office, Washington, 1941.

CHAPTER 10

THE ORGANIZATION OF BUSINESS OWNERSHIP

(Continued)

THE CORPORATION

A corporation may be defined as a form of ownership organization in which individuals combine their wealth in a business unit which traditionally has been regarded by the law as if it were a being separate from those who compose it. A corporation is an artificial business entity. It is a legal personality representing an aggregation of individuals who have cast their financial lot together in an organization distinct from any and every one of them.

A corporation may engage in business under its own name; may hold, manage, and dispose of property; and may distribute the profits among those who have associated their interests as co-owners (usually called "stockholders"). The corporation is organized on the basis of a charter granted by one of the state governments. The owners are given shares of stock in return for their contribution to the corporation's assets. The shares, which are certificates of ownership, may be transferred easily from one person to another. The life of a corporation is not bound up with the lives of its owners. Its debts are not guaranteed by the property of its owners; they are usually supported only by the property and other assets actually owned by the corporation.

Historical Development. Like most of the other types of business organization described in this chapter, the corporation does not represent a new economic institution. It was not invented to fulfill the purposes and satisfy the needs of modern business, although the intensive development of the corporate type of enterprise is certainly the result of the impetus given all business by the Industrial Revolution. In its modern form it represents the slow development of centuries of business experience.

Organizations related to the modern corporation were known in the days of the Roman Empire. The joint-stock trading companies of England and Holland in the seventeenth century represented concentrations of capital funds contributed by shareholders, which

clearly functioned for business life in that era in much the same way as the modern corporation functions for contemporary business. The foundations for the doctrine which regards the corporation as a separate legal person distinct from either its officers or its owners were laid down in the seventeenth and eighteenth centuries, and were supported by legal decisions in the United States in the nineteenth century.

The revolution in the efficient size of economic units, induced by the power and mechanical discoveries of the late eighteenth and early nineteenth centuries, created a need for large accumulations of capital funds. Growing business units could not be financed by individuals or partnerships. In all but a few unusual situations, the required sums of money could be raised only by contributions from many associated investors.

The corporation offered the most effective device for combining the separate investments of many individuals under unified business control in a single business entity, while preserving the safety of the wealth of the individual owners not directly invested in the corporation. As a result of these conditions, the corporation in the nineteenth century rapidly assumed first place as the most popular and widely used form of business organization. Beginning in such business fields as railroads, banking and insurance, and textile manufacturing, it has extended its influence into practically every area and type of business. Indeed, some writers anticipate a time when practically all economic activity will be carried on by means of corporate organizations.

Developments in the Use of the Corporative Device. We may distinguish three significant periods in the use of the corporative device. In its early development, the corporation was created by a grant of power by the king, was largely subservient to the king, functioned under a rigid code of dictated rules, and was subject to substantial and close regulation.

In this period when both the Far East and the Western Hemisphere were opened for trade, the dangers of carrying on business at a distance were great, and enormous sums were required to fit out and finance trading voyages. The trading companies, organized by royal decree, required funds to float their expeditions. The growing capitalist class in England was seeking investment opportunities. The joint-stock companies, typical of the early period of the corporation, offered both opportunity and reward.

In the second period, corporations were created by legislative enactment. Each corporation required separate legislative action. In this period, extending roughly from the seventeenth to the early nineteenth centuries, the power of stockholders over management and the limited liability of stockholders became widely recognized. In the third period power to grant corporate franchises was delegated by state legislatures to state officials. Incorporation became open to all filing formal application for charters in the approved manner of statement.

Beginning in the later years of the nineteenth century, government relaxed its control over private business operating through the corporative device. There arose a competition between states in their laxity of regulation, followed by a natural flow of new corporations toward those states which were willing to grant broad charters to corporations and their managers. One result of this development has been a general freedom for corporate activity in every line of business. It should be noticed, however, that the several states do not maintain the same standards and requirements with respect to the organization of corporations within their borders.

THE ADVANTAGES OF THE CORPORATE FORM

A listing of the advantages of the corporate type of organization may assist the reader to understand why this form of organization has spread so rapidly that it has outstripped all other forms of business organization.

Limited Liability of Stockholders. An owner in a corporation is known as a "stockholder." This term is based upon the fact that ownership is evidenced by certificates of stock issued to those contributing capital. Unlike the position of the owners in many of the other forms of business organization, the stockholder in a corporation usually risks only the money he has invested in the business. If the debts of the corporation exceed its assets, at a time when the creditors are pressing for payment, the creditors cannot rely upon the private wealth of the stockholders to satisfy their claims against the business. The corporation has been given a kind of fictitious existence as a separate person in the eyes of the law. Against its debts can be applied only its assets. Whatever wealth is possessed by the stockholders, which has not been invested in the business, has no connection with the affairs of the corporation.

Concentration of Control. Managerial supervision over corporate matters is exercised through a board of directors elected by the stockholders. The board of directors in turn appoints officers to manage the affairs of the business. The officers responsible to the directors, and the directors responsible to the stockholders, have complete control over the affairs of the business. They must report periodically to the stockholders. The directors are subject to removal or replacement by vote of the stockholders at a regular meeting. The stockholders themselves, the owners of the business, do not have any powers to act for the corporation. Indeed, they do not have any legal title to the property of the corporation, since all possessions of the business are held in the name of the corporation and not in the names of the various stockholders.

Ease of Transfer of Ownership. In discussing the proprietorship and the partnership forms of organization, it was pointed out that difficulty is encountered when an attempt is made to transfer ownership from one person to another. This difficulty usually does not occur when the corporate device is employed. Possession of shares of stock is evidence of ownership, and this ownership right may be transferred from one person to another simply by the sale of the shares. The transfers may occur at the will of the shareholders. They do not in any way affect the life or the continuous business activity of the corporation. An owner may withdraw from the corporation by selling his stock to another individual, without attaching to the corporation either burden or responsibility, and without in any way interfering with its continuous existence.

For the investor, the feature of transferability of ownership is one of the most attractive aspects of the corporate form of organization. Many individuals might hesitate to risk money in a business venture if they knew that it would be difficult to withdraw their money whenever they desired. The corporate device offers at one and the same time the appeal of continuous business activity by the corporation, with the added possibility of entrance and withdrawal from ownership rights by every individual investor. This consideration has been one of the most effective of all corporate advantages in stimulating general investment and in making possible the accumulation of large sums of money for disposal of the corporation's management.

Ease of Expansion. Because the corporation may draw upon a large group of potential investors for added money, by issuing and

attempting to sell more securities, this type of organization can readily be adapted to an increase in the scale of business. Such a change in the size of operations, made possible by the addition of large sums of new money, may be accomplished without any formal reorganization of the business. This is in sharp contrast to the operating difficulties commonly encountered in expanding either the individual proprietorship or the partnership.

DISADVANTAGES OF THE CORPORATE TYPE OF ORGANIZATION

Certain difficulties connected with the organization and management of a corporation should be cited.

Complexity of Formation. The corporation comes more directly under government control than any of the other types of business organization discussed in this chapter. Whereas both the proprietorship and partnership may be formed without appeal to the state, entirely at the will of those who undertake to engage in business, the corporation operates under a charter granted by the state. The charter may be regarded as an agreement between the state, the corporation, and the stockholders, covering the type of business to be engaged in by the corporation, the nature and amount of the financing required to organize the business, and the general relations which will exist between the corporation and its owners. Incorporation laws in many states have become increasingly loose, permitting the organizers in many instances to insert almost any clauses they wish into the charter and adding greatly to the flexibility of this type of organization.

But the basic legal practice remains unchanged. A corporation can be organized only after the organizers have filed an application for a charter in accordance with statutory requirements. Following the granting of the charter, the corporation operates under laws enacted by the states for the protection of creditors and stockholders.

The legal expenses which may be incurred in organizing on this basis are often substantial. Further, the organization of the corporation itself may take some time and in many states a number of special taxes are levied upon corporations which should be regarded as added burdens incurred by this type of organization.

Relative Lack of Freedom in Business Action. In contrast to the proprietorship and the partnership, the owners of which are

relatively free to engage in any business activity they choose, the corporation may do only those things which are specifically set forth in its charter. In some cases, this may present a serious limitation of freedom of business action. It becomes a major difficulty whenever the incorporators have defined the nature of anticipated activity too closely, or when the needs of the future have not been clearly foreseen. Remedy may be sought through an amendment of the corporation's charter. Study of the corporate device from the legal point of view has induced such an elasticity in the phrasing of corporate business that this type of limitation of activity has become less serious in recent years.

Weakening of Credit. Although the corporation presents to the individual investor the attractive feature of the limitation of his risk to the money he has invested in the business, this may be an unattractive consideration for the creditors of the corporation. The only strength to which they can look for support of the debts owed to them is the sum of the assets of the business. A corporation which has been poorly financed or one that, either through mismanagement or unfortunate business ventures, has been seriously weakened financially may be an unattractive business risk to other business men or to banks.

ORGANIZING A CORPORATION

The actual process of organizing a corporation follows in most states the procedure outlined in the following paragraphs.

Selecting a State. Following the development of all plans for the undertaking and the decision to proceed with organization, the first consideration is the selection of the state in which the corporation is to apply for a charter. Because of the marked variation in state laws governing corporate charters, taxation, reports, and the conduct of corporate business, large-scale enterprises may find it expedient to investigate organization and operating conditions in several states. Small enterprises usually find it simpler and in the long run less expensive to incorporate in the state in which they plan to center the bulk of their business. In this way they avoid the payment of additional taxes, the preparation of duplicate reports, and the maintenance of seldom-used offices of record in the alien state of incorporation.

Large enterprises with widespread operations and scattered

properties have a choice of incorporation sites. Among the factors to which consideration might be given are the following:

1. The relative laxity or severity of state regulations governing corporate operations. This would include the requirement of strict definition in the charter of corporate activity; the kind, number, and variety of reports required; types of stock which may be issued; and stated duties and responsibilities of officers in their relations with stockholders.

2. Comparative organization and operating taxes and fees in the several states. Among the various types of taxes which may be incurred are incorporation fees, annual franchise taxes, capital-stock tax, income tax, stock-transfer tax, and many others. Variations between states are often surprising. Financial writers have observed that the charter of the United States Steel Corporation cost about $220,000 in New Jersey. If the enterprise had been incorporated in Pennsylvania, the expense would have been in excess of $3,000,000. Pennsylvania laws would have limited business activity to a single area of economic activity, whereas New Jersey's corporation laws allowed a broad statement of executive powers and operating activity.

3. General attitude of the state legislature toward corporate activity. Some states have maintained stable legislation for corporate activity and have been friendly to an influx of corporate business. Other states have come under the influence of anti-corporate interests, have passed stringent regulatory legislation, and have been inconsistent in the application of existing laws.

4. Comparative attitudes toward stockholders' rights.

5. Comparative regulations governing the issuance of various types of securities and the liabilities of responsible financial officers.

These are all problems for the large corporation. Economy and convenience usually dictate home incorporation for small enterprises.

Securing a Charter. Following the selection of the state in which a charter is to be sought, application is directed to the responsible state official (usually the Secretary of State). The charter application must be filed in the approved form and accompanied by the requisite fees. Legally, the charter is a three-way contract: between the stockholders, between stockholders and the corporation, and between incorporators and the state. The charter

ordinarily contains a statement of the corporation's name, the names of the incorporators, the chief place of business, the nature of the business, the amount of authorized capital, and a statement (following state law) of the duties and responsibilities of stockholders, directors, and officers. In this connection, it is important to observe that a corporation may engage only in that type of business authorized by and clearly stated in its charter.

The following blank charter form for the state of Indiana illustrates typical charter provisions.

ARTICLES OF INCORPORATION

OF

____

The undersigned, being three or more natural persons of lawful age, at least a majority of whom are citizens of the United States, do hereby adopt the following articles of incorporation, representing beforehand to the Secretary of State of the State of Indiana and all persons whom it may concern, that subscription lists for subscriptions to the shares of the capital stock of the above named corporation for which certificate of incorporation is hereby applied for, have heretofore been opened in accordance with law and that subscriptions to the shares of the corporation have been obtained in an amount not less than One Thousand ($1000) Dollars.

Be it further remembered that the following Articles of Incorporation and all matters heretofore done or hereafter to be done are in accordance with "An Act concerning domestic and foreign corporations for profit, providing penalties for the violation hereof, and repealing all laws or parts of laws in conflict herewith," approved March 16, 1929, and all acts amendatory thereof and supplemental thereto.

1. The name of this corporation shall be ______________________________

____

2. The purpose or purposes for which it is formed are as follows:

3. The period during which it is to continue as a corporation is ______ years.

4. The post-office address of its principal office is ______________________________ Street, ______________________________(City) ______________________________(County) ______________________________(State)

The name of its resident agent is ______________________________

The post-office address of its resident agent is ______________________________ Street, ______________________________(City) ______________________________(County) ______________________________(State)

5. The total number of shares into which its authorized capital stock is to be divided is ______________________________

____

consisting of shares as follows:

______________________________shares having a par value of $______________________________

______________________________shares having no par value

6. (If the shares are to be divided into class or kinds the designations of the different classes, the number and par value, if any of the shares of each class, and either (a) a statement of the relative rights, preferences, limitations and restrictions of each class, or (b) a provision expressly vesting authority in the board of directors, subject to such restrictions as may be provided, to determine the relative rights, preferences, limitations and restrictions (other than voting rights) of each class by resolution or resolutions adopted prior to the issuance of any of the shares of such class; and, if the shares of any class are to be issuable in series, descriptions of the several series and either (a) a statement of the relative rights, preferences, limitations and restrictions of each series, or (b) a provision expressly vesting authority in the board of directors, subject to such restrictions as may be provided, to determine the relative rights, preferences, limitations and restrictions (other than voting rights) of each series by resolution or resolutions adopted prior to the issuance of any of the shares of such series.)
Indicate here:

____

____

____

____

7. (If the shares are to be divided into classes or kinds, a statement of the voting rights and powers, if any, of the shares of each class, and of each series if the shares of any class are to be issuable in series, including the extent, if any, to which the shares of each such class and series shall be entitled to vote on questions of merger, consolidation and the sale of all or of substantially all of the assets of the corporation.)
Indicate here:

____

____

____

____

____

8. The amount of paid-in capital with which this corporation will begin business is $____________ (This must not be less than $500.00.)

9. The number of directors of this corporation shall be ______ (This must be an exact number and cannot be stated in the alternative.)

10. The names and addresses of the first board of directors are as follows:

Name	Street	City	County	State
______	______	______	______	______
Name	Street	City	County	State
______	______	______	______	______
Name	Street	City	County	State

11. The names and post-office address of the incorporators are as follows:

Name	Street	City	County	State
Name	Street	City	County	State
Name	Street	City	County	State

12. (Any other provisions, consistent with the laws of this state, for the regulation of the business and conduct of the affairs of the corporation, and creating, defining, limiting or regulating the powers of the corporation, of the directors or of the shareholders or any class or classes of shareholders.)
Indicate here:

STATE OF INDIANA
County of ______________

Before me, ______________, a Notary Public in and for said County and State, personally appeared

and severally acknowledged the execution of the foregoing articles of incorporation.

(SEAL)

WITNESS my hand and notarial seal this ________ day of ________ ____ 19 ______

Notary Public

My commission expires ______________

(Articles of incorporation must be prepared and signed in triplicate in the form prescribed by the Secretary of State, by all of the incorporators and acknowledged by at least three of them before a Notary Public, and shall be presented in triplicate to the Secretary of State at his office accompanied by the fees prescribed by law.)

OWNERSHIP AND CONTROL

In both the individual proprietorship and the general partnership, the owner (the supplier of money to finance the business) and the manager (the director of business activity) are identical. The one who puts up the money runs the business. The giant modern corporation is breaking down this union of ownership and con-

trol. The owners of a corporation are the individuals who advance the money which enables it to organize and carry on business. In the largest corporations the number of different owners may be calculated by the hundreds of thousands. Many of these are small investors possessed of no great accumulation of wealth. They put up the money, they take the risks of the business, and they receive (or expect to receive) the profits. But they do not manage the business. In many cases, indeed, they exercise little or no influence over management policies.

Separation of Ownership and Control. The limited power of participation of individual owners in the larger corporations is suggested by the following figures. The Pennsylvania Railroad has over 200,000 stockholders, no one of whom owns as much as 1 per cent of the outstanding stock. The American Telephone and Telegraph Company has over 600,000 stockholders. The largest single stockholder in this group, an insurance company, owns only about 1 per cent of the stock outstanding. In only a few instances, in the list of the large corporations, do the stock holdings of any individual exceed 1 per cent of the total stock outstanding.

The factors which prevent the stockholders in a large corporation from exercising effective control over the administration of the company's affairs include their distance from the executive offices, their scattered places of residence, their ignorance of company business, the complexity of the administrative task in big business, the multiplicity of individuals each of whom is part owner, their inability to exchange views on administrative policies, and their lack of means for giving effective unified expression to their views.

The efficient administration of the business of a large corporation requires a unified group of executives fully informed about operating problems, able to act promptly, free to create and maintain flexibility in management outlook. A multitude of small stockholders cannot possibly act in this way. They cannot even collect enough information about the corporation's affairs to form a basis for intelligent decision. The best they can hope to do is to elect directors to supervise the actions of the company executives and then to judge the effectiveness of directors' and executives' services by the profit records of the company, and to replace directors and officers when the financial performance appears to be unsatisfactory. Failing this, they can sell their stock.

Devices of Minority Control. Even this measure of control is disappearing in the larger corporations. Widespread stock ownership by tens or hundreds of thousands of scattered individuals has prevented more than a few stockholders from attending the annual stockholders' meetings, voting on company policy, and expressing their confidence or disappointment in the performance of directors and officers. Rarely do more than a handful out of many thousands of stockholders find it possible to attend the annual meetings of corporation owners.

Those who do attend usually own an infinitesimal proportion of the outstanding stock and are readily outvoted by the larger proportion of the shares held by directors and officers, partly in their own names, and partly through their solicitation of proxies from absent stockholders. The proxy is a legal instrument by which a stockholder transfers to another the right to vote his shares. When a large corporation notifies the stockholders of a scheduled meeting there usually accompanies the notice a proxy form on which the stockholder may designate someone else to vote for him at the meeting. The proxy furnished by the management is printed with the names of individuals selected by the management. Ignorant of the names of other stockholders who plan to attend the meeting, the owner of a few shares is likely either to throw away the proxy, or to sign and return it to the corporation. Enough proxies are usually returned in this way to enable the existing management to control votes necessary to guarantee approval of its policies and support for its continuance in office.

Occasionally, battles take place over the control of proxies. A group of large stockholders may become dissatisfied with management policies and attempt to gain control of the company's affairs. They may engage in a competitive struggle for proxies in the hope of winning the next elections for company directors. The stockholder will then find himself the focus of attention of this group and the incumbent management as well, both sides striving to secure his signature on a proxy. The advantage in such a battle lies with the management which has an integrated working group and is in a position to use company records and company clerical help, while the other group must organize independently and finance the cost of obtaining proxies.

A number of other devices may be used to concentrate control. One of these is the voting trust, a device which places a majority

of the stock in the hands of a small group with power to vote the stock as they see fit. Another device is to grant voting rights (power to influence policy, elect directors, etc.) to only a small proportion of the stock issued. Still other devices have been utilized from time to time, and the reader may study their effect in a textbook on corporation finance.

The Holding Company. Of all devices used to concentrate control in the hands of a small group none has become more widely publicized than the holding company. A holding company may be briefly defined as a business engaged in owning or controlling other businesses. It usually secures control by the ownership of voting securities of other businesses in a quantity sufficient to give it substantial influence over the operating policies of the controlled companies. Theoretically, this involves the ownership of more than 50 per cent of the voting stock of each controlled company. Actually, because of the strength of a concentrated minority interest when voting shares are very widely distributed among thousands of scattered stockholders, substantial control over management policy can be secured easily with a stock holding of 25 per cent of the outstanding shares and is often achieved with a much smaller proportion. Corporations acquired power to own stocks in other corporations at a late stage in their history. The holding company has been developed extensively only in the past 30 years.

The holding company device was originally utilized for the entirely justifiable purpose of securing centralized managerial control over groups of companies and so deriving major economies in costs of operation and improvement in managerial efficiency. But it was soon discovered to be a useful device for controlling large sums of capital funds through a relatively small investment in a holding company. The ratio of controlling investment to total capital can be substantially reduced by the process of pyramiding holding companies. Thus, Company A can be an operating concern, 51 per cent of whose voting stock is controlled by Company B, which in turn is controlled by Company C through stock ownership, and so on almost indefinitely. If we suppose that Company A has $1,000,000 of voting stock, then a $501,000 investment by Company B will be sufficient to control Company A. To control Company B, Company C will not need to invest $501,000, for part of that money, perhaps as much as $300,000 may

be secured from the sale of nonvoting stock to the public. If this is done, then C can control B and still issue only a little over $200,000 in voting stock. Thus Company D can control C by ownership of 51 per cent of $200,000. In this way a small investment in Company D can, through the pyramided companies, control a large amount of capital invested in Company A.

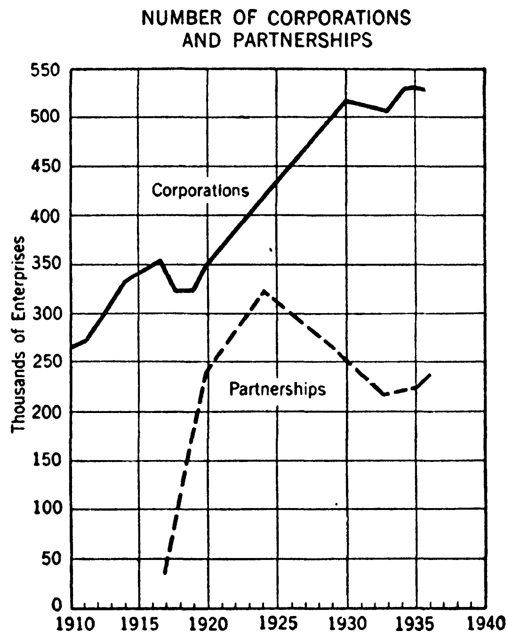
The holding company is one of the most flexible devices in all corporation finance. It may be used not only in the way and for the purpose described in the preceding paragraph, but for a number of legitimate business ends. It may also be resorted to for the avoidance of many types of regulation and taxation too complicated to be described here. Like so many other legal creations in the business world, the holding company is both a useful and a destructive device. It is capable of being a useful tool in business management, and, in other hands, a device for lessening competition and defying social control. Because of widespread abuses, particularly in the public-utility business, the holding-company device has been sharply attacked in recent years and will probably be subjected to increasingly critical examination in the future.

Effects of Divorcing Ownership and Control. It may be concluded that the very nature of the large corporation contributes to a separation of ownership and control. Ownership is widespread, while managerial control is in the hands of the senior officers, the directors who choose the senior officers, and the small group of influential stockholders (who may represent only a minor share of the stock ownership) who elect the directors. Investors themselves share the responsibility for this development. Too many investors have been reluctant to take the trouble necessary to inform themselves about the affairs, problems, and policies of the corporations of which they are legally part owners. They have ignored voting rights and have been apathetic to the protection of their own interests. They have been willing to reject all responsibility for and interest in control and authority. In those instances where management has proved ineffective, the average stockholder has apparently preferred to sell his shares rather than attempt to intervene in the process of policy determination or to take a more active part in the selection of the company's administrative heads.

PROBLEMS OF CORPORATE ORGANIZATION

Still another significant change can be traced to the influence of the corporation on the structure of the American economy. A handful of manufacturing enterprises were incorporated before 1800. Between 1825 and 1860 a number of state legislatures enacted general incorporation laws which removed the earlier

CHART 13



Data for this chart are based on the number of tax returns filed with the Bureau of Internal Revenue. The year to year variations are not strictly comparable in all instances, because of changes in the methods of reporting. Data for partnerships in 1917 represent only those partnerships subject to war excess-profits tax.

SOURCE: Temporary National Economic Committee, *Investigation of Concentration of Economic Power*, U. S. Government Printing Office, Washington, 1941, Part I, p. 93.

requirement of special legislation for each new corporation. The capital requirements of expanding industry joined with this new freedom in leading to a sudden increase in the number of incorporated enterprises.

Growth of the Corporate Form. Railway incorporations multiplied in this period. Industrial organization followed the

same pattern. By 1900 almost 75 per cent of the goods produced in the United States were being manufactured by incorporated enterprises. In that year alone 2500 new corporation charters were issued by the single state of New York. The number issued annually increased by more than 700 per cent in the next 20 years. By 1929, incorporated enterprises produced 92 per cent of the total value of all manufactured goods and employed 90 per cent of all wage earners.

For more than 30 years the number and proportion of corporations have been on the increase. Between 1910 and 1941, while the total number of all business enterprises increased slightly more than 45 per cent, the total number of corporations increased by more than 90 per cent.

Government Corporations. The use of the corporative device has not been limited to private business. Government corporations have a history of use in many foreign countries. Since 1933 they have grown in popularity in the United States. Among the government corporations which have been active in recent years in this country may be listed the following:

1. The Emergency Housing Corporation, engaging in slum clearance and the construction of low-cost housing.
2. The Federal Deposit Insurance Corporation, insuring certain deposits in banks and liquidating the assets of closed banks.
3. The Home Owners' Loan Corporation, engaging in a mortgage business.
4. The Reconstruction Finance Corporation, making loans to banks, railroads, and other types of private-business enterprises.
5. The Tennessee Valley Authority, engaging in a variety of activities ranging from the development and sale of electric power to the vocational education of the natives of the Tennessee Valley.

These are only a few of the many government corporations which have been set up along lines parallel to the organization of private corporations.

Increase in the Size of Corporate Units. Not only has there been a gain in both the total number of corporations and their relative importance with relation to all business enterprises in the last three decades, but there has also been a trend toward an increase in the size of the individual corporation. It has been

estimated that corporations employing over 250 persons, which include only about 1 per cent of the total number of employers in the United States, pay 50 per cent of all the employee wages in this country. Less than 200 of the largest corporate enterprises, each of which employs more than 10,000 workers, have on their pay rolls more than 12 per cent of all the workers.

If the examination is centered on the study of corporate assets we observe that less than 800 corporations, approximately 0.2 per cent of all the corporations, control assets of more than 50 million dollars each, which constitutes more than half the total assets of all corporations and one-quarter of the national wealth. This contrasts with approximately 55 per cent of all the corporations in the United States, which control assets of under $50,000 each, amounting in the aggregate to less than 1½ per cent of the total assets of all corporations.

TABLE 5

IMPORTANCE OF CORPORATE ACTIVITY BY BRANCHES OF INDUSTRY, 1937

Industry	*Per Cent of National Income*	*Per Cent of Business Done by Corporations in Each Industry*
Agriculture	8.9	7
Mining	2.1	96
Electric light and power and manufactured gas	1.6	100
Manufacturing	24.0	92
Contract construction	2.1	36
Transportation	7.3	89
Communication	1.3	100
Trade	12.5	58
Finance	9.3	84
Government, including work-relief wages	13.5	58
Service	11.9	30
Miscellaneous	4.2	33

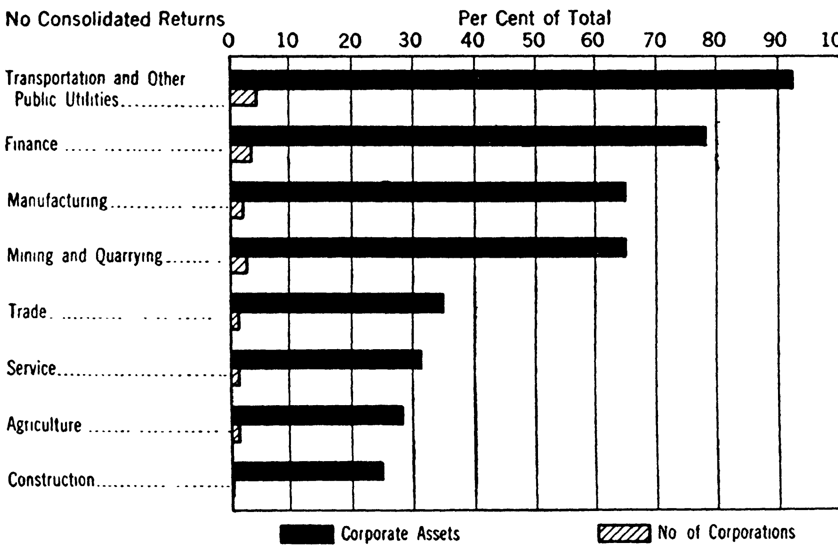
SOURCE: Temporary National Economic Committee, *Investigation of Concentration of Economic Power*, p. 96.

In the pioneering study, *The Modern Corporation and Private Property*, by A. A. Berle, Jr. and Gardiner C. Means, the authors list 200 of the largest nonfinancial corporations in the country and

point out that there is a decided tendency for these corporations to appear in groups in various industries. Thus, 20 of the large corporations are petroleum companies, 11 are manufacturers of iron and steel, 4 manufacture automobiles, 4 produce tires, 4 are in the coal business, 3 are copper producers, 3 are meat packers, and 3 are in the paper industry. Two conclusions may be drawn: (1) that there is a strong force in American business leading to the growth of large corporations; (2) that there is a tendency for large enterprises to appear in particular industries. Some indus-

CHART 14

ASSETS OF LARGE CORPORATIONS, $5,000,000 AND OVER
PER CENT OF INDUSTRY TOTAL 1935



SOURCE: Temporary National Economic Committee, *Investigation of Concentration of Economic Power*, U. S. Government Printing Office, Washington, 1941, Part I, p. 106.

tries are very clearly dominated by a small number of large companies, while other industries are dominated by a large number of small companies.

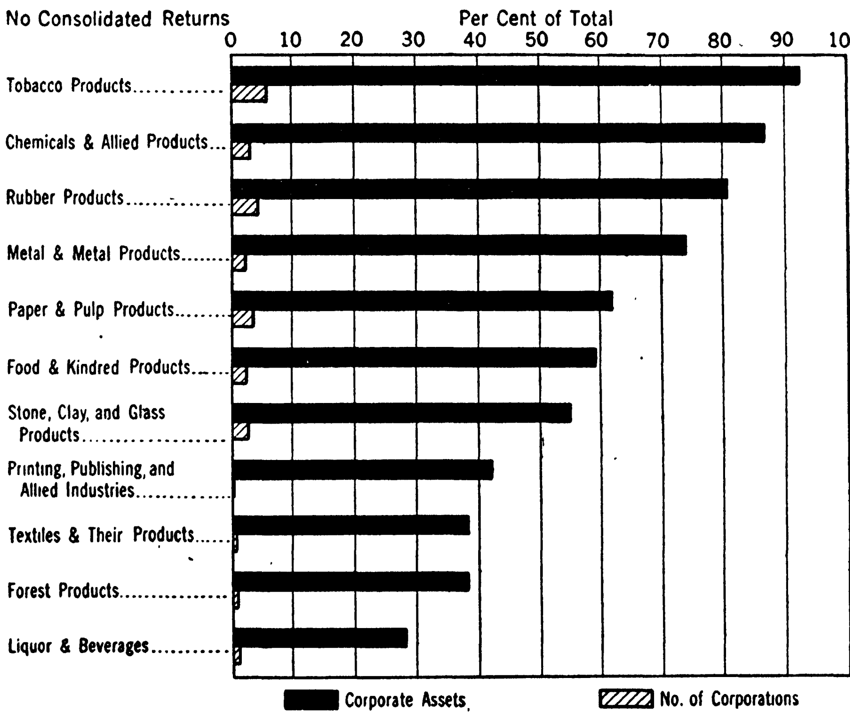
The 200 largest nonfinancial corporations controlled in 1933 one-fifth of the national wealth, almost one-half of the nation's industrial wealth, and approximated 60 per cent of the physical assets of all nonfinancial corporations. The rate of growth of these largest corporations exceeded that of the smaller corporations. In fact, Berle and Means suggested that maintenance for 20 years

of the 1924–1929 rate of growth of the 200 largest corporations would result in their control of four-fifths of all nonfinancial corporate wealth.

The Social Impact of Corporate Growth. This growth in large-scale business, typified by the development of the giant corporation, means that an increasing number of individuals in this country work for others, while a decreasing number are

CHART 15

ASSETS OF LARGE MANUFACTURING CORPORATIONS OF $5,000,000 AND OVER
PER CENT OF INDUSTRY TOTAL 1935



SOURCE: Temporary National Economic Committee, *Investigation of Concentration of Economic Power*, U. S. Government Printing Office, Washington, 1941, Part I, p. 107.

independent operators of their own businesses. This concentration of economic power, with its consequent dependence of most workers on distant management, has introduced problems in business organization which do not lend themselves to easy solution.

It becomes increasingly difficult for the state to control the corporation which, decade after decade, steadily grows in power, acquiring financial strength, sometimes even an indirect influence over government affairs.

The segregation of ownership and control presents the problem of maintaining the significant advantages of the corporate type of organization while at the same time securing that shrewd administration of resources which is the customary product of the close union of ownership and control. It is imbedded in the nature of the corporate device that directors should represent the stockholders. If they represent only a minority of the stockholders, the interests of owners and managers are divorced or opposed and the corporate device may become a tool of mismanagement and irresponsible control.

One result of these difficulties, present and anticipated, may well be a recognition of the desirability of adapting some of the aspects of established corporation law to changing economic conditions. The corporation — the youngest of the major forms of business organization discussed in these chapters — is regarded by many as perhaps the least stable, in the sense that the legal background governing the organization and the operation of corporations is still in a state of flux. It may well be subject to further change in the future. The corporation has proved to be an extremely efficient, flexible, and useful type of organization. Its services in the development of modern business have been of the greatest significance. But the problems it has introduced strike deep into the major economic difficulties of our times.

One of these problems certainly is closely allied to the very existence of private property. For generations men have associated with the institution of private property a drive and incentive in economic affairs which have been impelling forces in social and economic progress. But the corporation substitutes indirect for direct ownership. Not only does it separate ownership and management; at least in the larger corporations, it effectively separates all but a small portion of the owners from any vestige of effective control.

Thousands of stockholders furnish the large corporation's capital; but they do not select the officers; they know nothing of its operations; they never survey its factories or its distributive agencies; they either do not read or cannot interpret its financial

statements; they know nothing of its problems, its labor relations, its competition.

What changes in the working of the free-enterprise system will follow this creation of an ownership group devoid of both the will and the ability to assume controlling responsibilities? Power gravitates into the hands of a class of professional managers who, themselves, neither own any substantial share of the properties they manage nor feel any direct responsibility to the majority of those who do own the properties. What will be the result of this development? Will the private-enterprise system continue to function along the lines of its beginnings? Is the incentive the same?

Or again, what will be the effect upon the American economic and social order if the larger business units acquire even greater dominance over manufacture and trade? There are still many industries in which both the corporate form of organization and large units have not won commanding positions. Agriculture and retailing are still havens for small enterprises. Many students of problems of social stability are convinced that the maintenance of small enterprises is essential, and that there must remain in many areas of the American economy a close relation between ownership and management. What will become of small enterprise if the present trend toward corporate bigness continues?

The Conflict of Legal Jurisdiction. The years of corporate growth have introduced further problems between states. Corporations are organized on the basis of state-granted charters. In their eagerness to attract industry, several of the states have relaxed their regulatory powers. The corporation laws of the various states are in complete disagreement over such important matters as taxation, control methods, responsibility of corporation officials, and corporate freedom in doing business.

Steps toward Reform. It is becoming increasingly clear that a period of reform lies ahead in the areas of social, economic, and legal control of the corporation.

The Securities and Exchange Commission, a federal agency, already has attempted to strengthen owner control of corporations by restricting the solicitation of proxies and by limiting the freedom of directors and officers in trading in their company's securities. Proposals for further reform include limitations on the size of corporations, the imposition of stricter standards of responsi-

bility upon the officers and directors of corporations, and federal (rather than state) incorporation of companies engaged in business in several states.

We are in a period in which the misuse of the corporate device is being subjected to searching criticism. It has been a significant organizational form in American business. It should not be sacrificed. But there is reason to believe that some process of adaptation and change will follow as the line of critical examination traces the connection between recent tendencies in the corporate economy and some of the most far-reaching economic problems of our times.

DEFINITIONS

Holding company. A business engaged in owning or controlling other businesses, ordinarily through ownership of a dominant common-stock interest.

Proxy. Legal instrument by means of which a stockholder transfers to another his right to vote at stockholders' meeting.

QUESTIONS, PROBLEMS, PROJECTS

A

1. Define a corporation.
2. Who are the owners of a corporation?
3. In what historical period do we first find evidence of a business organization comparable to the modern corporation?
4. In what business fields in the United States did the corporation develop most rapidly?
5. Each state has its own laws concerning incorporation. Are they uniform from state to state? Should they be?
6. What are three disadvantages of the corporate form of ownership?
7. Why is an investor attracted by the ease with which the ownership of a corporation is transferred?
8. What two general classes of people are incorporation laws designed to protect?
9. Why is it difficult for the stockholders in a large corporation to exercise effective control over the company's affairs?
10. Realistically, is the proxy designed to aid the stockholders or the existing corporate management?
11. How does a holding company assert its control over the operating companies?
12. How long has the holding company been an important form of business organization?
13. In 1929 what percentage of manufactured goods was produced by incorporated enterprises?

14. What two conclusions may be drawn from the study of A. A. Berle, Jr. and Gardiner C. Means?
15. In what two economic areas do small units persist?

B

1. In what sense is a corporation treated as being independent of owners? Is a corporation in fact independent of its owners?
2. Compare the liability of a stockholder in a corporation with the liability of a partner. Why should there be a difference?
3. It has been said that the law regards a corporation as a person. Explain.
4. Is the corporation as a form of business organization peculiar to the private-enterprise system? Defend your position.
5. What are the economic arguments for and against rigid rules governing the formation of new corporations?
6. Do the owners of a corporation have as much power to act for the business as the owners of a partnership? Do they have as much legal responsibility?
7. From a realistic point of view do the owners of a corporation have any power at all? What is it?
8. Compare the transfer of ownership in a corporation with the transfer of ownership in a partnership and an individual proprietorship.
9. From a creditor's point of view is a poorly financed corporation as good a risk as a poorly financed partnership? Why?
10. From your general knowledge would you predict a bright or dismal future for the holding company in the United States? Why?
11. An individual stockholder has relatively little control over the management of a corporation. What is this separation of management and ownership likely to mean in terms of socially responsible business decisions?
12. Evaluate the statement, "If the managers of a business are forced to bear the risks of their own decisions as to business policy, we can expect more socially and economically responsible conduct on the part of business men." Does this statement argue for or against the holding company as a method of organization?
13. Do the managers of a typical large corporation bear any risks for their decisions? Does this make for more or less responsibility on their part?
14. What will be the probable result of boards of directors representing only a minority of stockholders when making decisions? (Keep the statement of question 12 in mind.)
15. Will the social responsibilities of enterprises increase or decrease as corporations grow larger, forcing an ever-increasing number of employees to rely upon an ever-decreasing (proportionately) number of employers? Discuss thoroughly.
16. Since managers of corporations no longer risk their own property with each economic decision, their sense of responsibility to (1) the owners of the property involved and (2) the consuming public is dulled. Hence, the government is justified in regulating business management more closely in order to protect the interests of investors and the general public against the wastes of irresponsible action. Argue on both sides of this proposition.

C

1. Trace the development of two large corporations predominant in the United States today.
2. Relying on any standard encyclopedia and supplementary readings, write a history of the modern corporation.
3. Investigate the laws of your state pertaining to the formation of new corporations and the legal rights and duties of old ones. Who grants the charter? What are the steps in order to get a charter? What legal obligations does a corporation undertake? What legal privileges is a corporation given?
4. Select a large corporation from whose published financial statements you can obtain information concerning profits made during the last five years and dividends paid. Assume you own 1 per cent of this company's stock. Acting upon the information which the selected corporation has given you, prepare a report telling whether you would sell or hold the stock and whether you would vote for or against the management at a stockholders' meeting. Explain each decision thoroughly.
5. Ascertain the legal steps which any group of business men must take in your state in order to incorporate.

SUGGESTED READING

Berle, A. A. and G. C. Means, *The Modern Corporation and Private Property*, The Macmillan Company, New York, 1932.

Temporary National Economic Committee, *Investigation of Concentration of Economic Power*, Monograph No. 29, U. S. Government Printing Office, Washington, Chaps. I, II.

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CHAPTER 11

THE ORGANIZATION OF BUSINESS ADMINISTRATION

In the last two chapters the organization of business ownership was described as a tool of management used in defining the financial relationships of the owners of business to one another, to other business men, and to the government. In this chapter we shall discuss the organization of business administration, ~~which~~ may be described as a management tool used in defining the mutual relationships of the employees of a business.

A good illustration of the significance of the careful definition of these relationships may be found in the organization of an army. The modern army is an incredibly complex machine. It includes not merely the fighting units of infantry, tanks, armored transport, air force, and specialized heavy-weapons detachments; but also a fleet of auxiliary services of supply, commissary, sanitation, and medicine. To fashion an effective fighting force from these diversified groups requires an organization which is made possible only by meticulous planning. Men knew this even in ancient Greece. Socrates pointed out that "a disorderly mob is no more an army than a heap of building materials is a house."

THE FUNCTION OF ADMINISTRATIVE ORGANIZATION

The foundation of organization is an exact definition, for every man and every position, of the twin boundaries of authority and responsibility. Every man in every position must know (1) the full extent of his duties under all conditions and in every situation, including a knowledge of all men over whom he has the power of command; and (2) the men whose orders he must obey in every situation in which he may find himself. Without such exact definition of authority and responsibility, the conduct of the military establishment would result in unplanned and uncontrolled chaos.

Cooperation through Organization. The organization of the employees of a business (from highest executive to lowest clerk)

is related to the functioning of that business as the organization of the men in an army is related to the functioning of the army. The purpose of organizing is the same in both cases. It is an attempt to secure intelligent cooperation between the members of a complex group. Individuals in the group have various jobs to do. The actions and decisions of one individual affect the actions and decisions of others in the group. Unless all individuals are welded together so that they can act cooperatively, frictions develop. The flow of work is interrupted, antagonisms flare, mutual understanding is impossible, men work at cross-purposes, and the energies which should be devoted to the advancement of the general interests of the business are wasted in internal struggles. In such a situation, it is impossible to create and maintain a feeling of loyalty toward the company.

It should be observed, however, that no business enterprise can adopt intact the principles and the practices of military organization. A number of changes must be made. Because of the need for decisive effort in times of crisis, a military organization must depend to a large extent upon a degree of enforced discipline which will guarantee unquestioning obedience. The skilled executive knows that human relations are an important factor in business. Employees are individuals with marked personalities. They must be induced to cooperate by means other than force. Leadership in business is allied to education more closely than to command.

The function of organization within a business is to induce orderly, planned, reliable cooperative effort throughout the concern. It includes a complex set of relationships which cover the duties attached to particular jobs, the interaction of one job and another, the lines of authority and obedience, the technique of reaching decisions, the process of putting decisions into action, the avenues of promotion, the play of human personalities, and the planning of coordinated effort. No business organization can be regarded as good unless it handles these relationships effectively.

A shallow view of this problem might suggest that a wage system could be devised to bring about the desired end. Pay a man enough, it might be argued, and he will do what you want him to do. Give him the proper incentive, and he will devote to his job the greatest effort of which he is capable. But this sug-

gestion is misleading. It is true that men work for monetary gain; and it probably is also true that the greater the potential gain, the harder they will work. But if they are not organized in such a way that their individual efforts are smoothly coordinated for the good of the company as a whole, they will achieve little beyond their own exhaustion. The individual members of an army cannot make up for lack of coordination by extreme personal bravery. A good organization provides the framework within which the best efforts of each individual contribute to the best performance of the company.

The problem of securing satisfactory organizational relationships is made more difficult by the division of industrial man power into a series of highly specialized jobs. When one man starts with a piece of leather and personally performs every shoe-manufacturing job right through to the finished product, the organization problem is relatively simple. But when the shoe-manufacturing process is subdivided into a series of highly specialized jobs, each performed by one man, the task of organizing activities is extremely complex. Raw materials must be purchased. Machines must be designed and installed. Labor must be trained, put to work, and supervised. The finished product must be sold. And every one of these jobs must be coordinated with all other jobs. This is the primary task of organization within every business.

ORGANIZATION PRINCIPLES AND THE INDIVIDUAL CONCERN

It is important to recognize that although these, or similar, organization problems occur in every business, they cannot be handled in the same way. Nor should it be assumed that an ideal form of organization can be devised which can be utilized by all types of companies, from the smallest to the largest, and in every industry. An organization structure for an enterprise must grow from the special conditions and problems of the company itself, from the personalities and abilities of its executives and employees, and from the historical development of authority and responsibility to which it has become accustomed.

Uniformity and Diversity in Organization. This does not mean that there are no general principles governing the organization of business administration. Such general principles have been worked out by the combined experience of many adminis-

trators. Some of the significant principles will be described in this chapter. But organization is a tool of business management. It must be used with intelligence and discrimination. No business can submit itself to an organization form as to a strait jacket. For every enterprise an organization structure must be evolved which will be well adapted to the problems and personalities of the enterprise, and yet will not depart from the line of tested organizational principles.

This is not a simple task. It can be accomplished successfully only if it is clearly recognized that the administrative organization of an enterprise is designed to increase the efficiency of operations, reduce waste, and concentrate and economize effort. If it does not secure these things, an organization plan has no value.

Devising the Plan of Organization. The exact plan of organization adopted by a business unit will depend upon several considerations. One of the most important of these considerations will certainly be the size of the plant and the extent to which operations and duties are specialized within the plant. Other things being equal, a large plant will generally have a greater division of operations and jobs along specialized lines than will be found in a small plant. Subdivision and specialization help to determine the plan of organization and contribute to its complexity.

Another consideration which affects the scheme of organization is the number of technical processes or commercial activities required by the business. The manufacture and sale of a single product of simple construction, the marketing of which presents no serious difficulties, may be managed with a relatively simple organization. The organization structure must be more complex when production covers a number of items of intricate construction, when the marketing job includes the sale of several products which require diverse distribution policies, and when the firm's operations extend over a wide geographical area. The larger American corporations, of which the General Motors Corporation is a good example, which manufacture a wide line of products in scattered factories; which purchase raw materials and parts from thousands of scattered suppliers; which hire, train, and direct many thousands of workers in various parts of the country; and which sell this diversified group of products in every section of the United States, or even in foreign markets, to all kinds of

purchasers, some of whom buy in small quantities, others in large, depend upon an extremely complex organization structure to assist in maintaining harmonious coordination within the corporation.

In addition to these considerations of size and complexity of operations, the form of organization found in any company reflects, to some extent, the personalities and abilities of the men who direct company policy. Some executives demand a concentration of authority in their own hands. Others prefer to delegate to subordinates a measure of responsibility for business decisions. Some men work effectively under a system of executive direction which relies on frequent committee conferences; others detest this type of control. In any company, the plan of organization finally selected must be one to which the social prejudices and abilities of individuals can be readily adapted.

Principles of Organization Structure. Within the framework of these general guiding considerations certain principles may be noted. These principles are common to all effective organizations, however they may differ in detail, or in technique of operation.

Definition of Authority. An effective organization calls for a clear definition of authority for every position. This definition should leave in the mind of every employee no doubt concerning whose orders he must obey and to whom he has the right to give orders. In connection with this definition of authority it is important to observe that authority is usually more effective when it is concentrated. An individual can follow without difficulty the orders of a single superior. When he must obey several superiors, he is easily confused, particularly because his superiors may be working at cross purposes, one impeding what another is attempting to advance. This general principle applies at every level of the organization structure, from the highest to the lowest.

Definition of Responsibility. An effective organization calls for a clear definition of responsibility for every position. For every job there should be prepared a carefully studied outline of duties and a statement of over-all responsibility. From this statement every employee learns those things he is expected to do and understands the area of the business within which he is supposed to function.

Alignment of Authority and Responsibility. To minimize friction and misunderstanding the area of responsibility and the area of

authority should be identical. An employee should be granted the authority necessary to fulfill all his responsibilities. No one should have authority which infringes on another's responsibilities. Departure from this principle is a fertile source of intracompany friction. It invites that competition of personalities which leads to a frittering away of talents and abilities in "office politics," misdirected effort, and wasted time.

Checks and Balances. An effective organization makes adequate provision for securing a balance between the several divisions of a company. The system of checks and balances which characterizes the division of the government of the United States into legislative, executive, and judicial branches is adaptable, with change, to a single business unit. Care must be taken to avoid such an intense development of balancing powers that action is unnecessarily delayed. A complete absence of such a system, however, may throw the enterprise out of harmonious progress. Such a balance must be achieved, for instance, between the purchasing, the production, and the marketing divisions. Within the production division, a balance must be worked out between the designing unit and the manufacturing unit. Within the marketing division, the balance must be established between the sales department and the office responsible for extending credit to customers.

At many points in a company, the immediate interests of various divisions come into conflict. The marketing division may want to sell products which are difficult to produce with existing facilities at reasonable cost. The designing unit may sketch plans which the manufacturing unit cannot easily translate into reality. The sales unit may solicit customers whose financial standing cannot be approved by the credit office. The plan of organization must provide for balancing and resolving all conflicting interests.

Provision for Education. An effective organization makes adequate provision for education. Men perform at their best when they understand both what they are doing and why they are doing it. Intelligent cooperation, rather than blind obedience, is the essence of the coordination of business activities. To this end it is important to establish in the structure of the organization channels through which the educational process can be carried forward as a regular part of the daily functioning of the business. Every leader of men, every executive, must be a teacher. The organization of the business must provide him both opportunity and incentive

to teach and discuss. An organization which impedes this educational process detracts from willing and effective action and makes no provision for future growth.

Preparation for Advancement. As part of the educational process an effective organization seeks to prepare men for advancement. This looks not only toward the encouragement of personal ambitions; it is also the basic guarantee of the continuous success of the enterprise. It minimizes the risk of the "indispensable" man, and ensures that no future personnel contingency will find a lack of trained men ready to step into vacant positions.

Internal Criticism. An effective organization makes adequate provision for self-criticism. It encourages suggestions and recommendations at every level of the business. It provides the machinery for evaluating new ideas impartially and, if necessary, for revising the organization itself.

Maintaining Morale. Finally, in connection with every one of these principles, an effective organization encourages and instills that state of good health in a business enterprise which grows from universal confidence, absence of confusion, encouragement and gratification of ambition, removal of sources of friction, and coordinated movement toward a clearly defined goal.

FORMS OF ORGANIZATION

Although no single form of organization can be recommended for universal adoption, a review of existing forms of organization reveals that they may be classified in several groups which can be distinguished from one another. As with the forms of organizing business ownership, forms of administrative organization shade into each other. But the significant characteristics of each type of organization are easily marked.

The following are the most common forms of administrative organization: line, functional, line and staff, and committee. They will be described in turn.

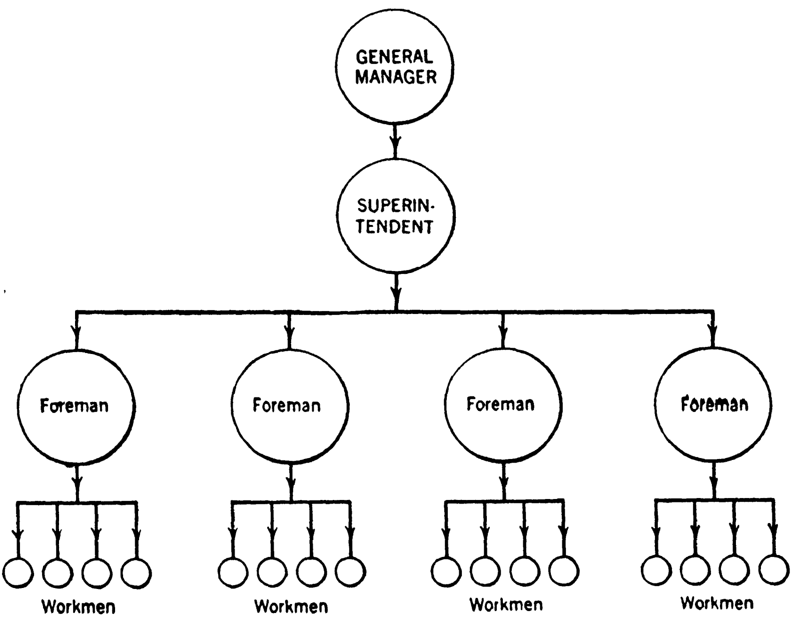
Line Organization. The line organization is probably the oldest and simplest form of administrative organization. It is modeled on the traditional military organization wherein supreme command was held by the general who directed brigades under brigadier generals, which in turn were divided into regiments commanded by colonels, which in turn were divided into battalions under lieutenant colonels or majors. The battalions were divided

into companies, commanded by captains; the companies into platoons under lieutenants; and the platoons into squads.

In the line type of organization all lines of authority extend vertically from superiors to subordinates throughout the organization. Each employee has one superior whose orders he must obey. He is responsible to his immediate superior for the performance of his work, and to no one else.

CHART 16

ILLUSTRATION OF LINE ORGANIZATION



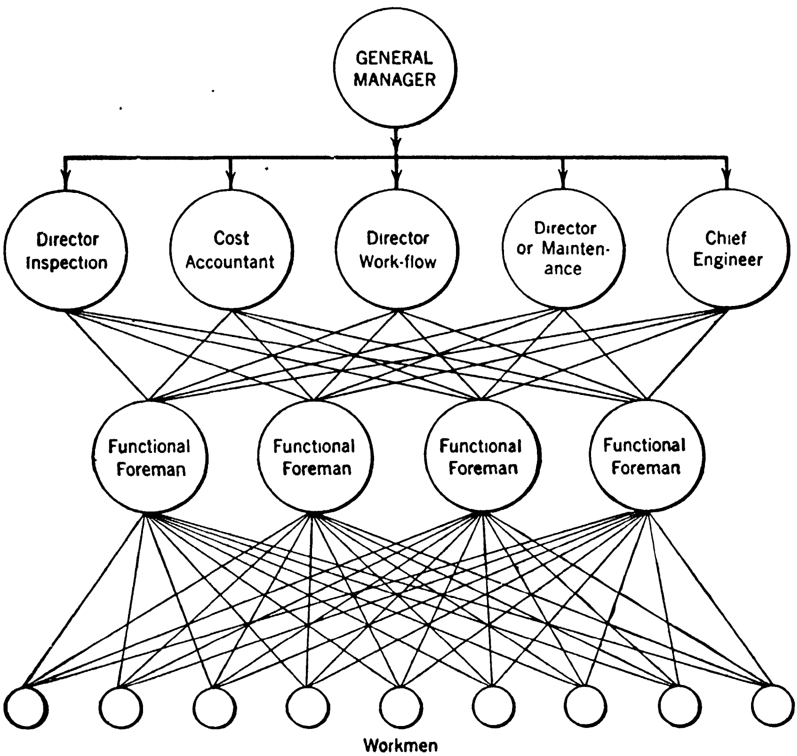
The line organization represents a highly simplified method of business administration. It has the significant advantages of absolutely clear definition of duties and responsibilities. In this form of organization, supervisors are in direct and continual contact with those over whom they have authority, and are solely responsible for the successful completion of all phases of the work of their departments. Performance and control are intimately related, and discipline is readily enforced.

Compared with other organization forms, however, the line type is somewhat inflexible. Foremen and other department supervisors may be called upon to direct a variety of activities when

they are expert in only a few. Special skills and knowledge may be wasted because of the failure to concentrate the attention of each individual on that work for which he is best prepared. A business organized in this way assumes the risk of continuing with outmoded methods because the higher officials are not specialists and, therefore, may fail to keep up with the newest developments in operating techniques.

CHART 17

ILLUSTRATION OF FUNCTIONAL ORGANIZATION



As a result of these dangers, actual or potential, one seldom encounters the line type of organization extending throughout a large enterprise. It is usually combined with other organization forms or employed in those sections of a business which carry on relatively simple tasks.

Functional Organization. In the functional organization supervisors specialize in concentrated areas of management prob-

lems and advise all sections of the business. Thus, in the illustration of military organization described above, the functional division of activities would create a special engineer unit to serve the entire army and to consult with field officers about engineering problems whenever they may occur. In the same way the quartermaster corps supervises the service of supply for the army and advises all units on problems of this nature.

To extend the illustration to business we may look to the organization of a chain of grocery stores. Here, a central purchasing division buys merchandise for all stores, but the purchasing director has no authority over store managers. The central accounting department draws up accounting forms for all stores, but the chief accountant has no authority over store managers.

The functional organization utilizes the expert knowledge of specialists as a source of counsel and aid to all divisions of the business. It extends the principle of division of labor, particularly at the executive level, and secures many of the advantages which flow from specialization.

This form of organization is not free from difficulties, however. As might be expected, it is not easy to secure a smooth coordination of directing activities. When a department foreman is directly or indirectly responsible to several functional officers, one consulting on engineering problems, another on personnel relations, and a third on workflow operations, conflicts and frictions may arise which prevent or delay necessary action. Internal executive specialization is not easily accommodated to severe fluctuations in business activity. It requires an unusually broadminded top executive to fashion a group of specialists into a unified executive body.

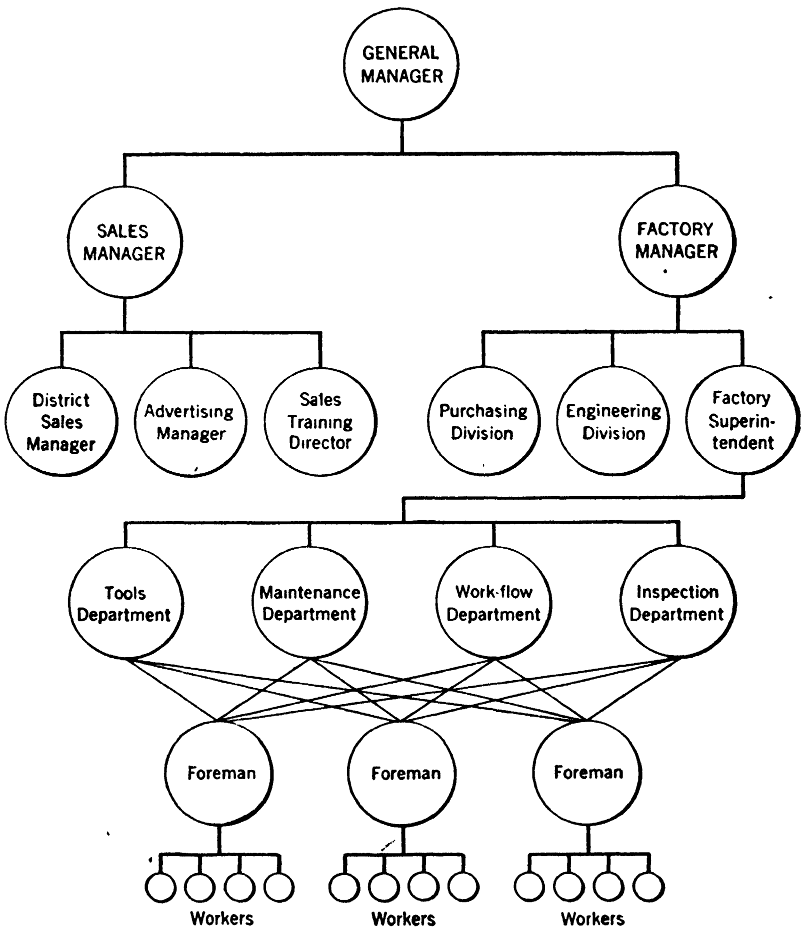
For these reasons, the pure functional form is as rarely encountered in business as is the pure line form. It is most often found in combination with other organization plans.

Line-and-staff Organization. The line-and-staff organization represents a combination of the principal features of the line and the functional organization. Each executive has certain line authority and certain functional responsibility. In the chain grocery organization described above, the advertising manager serves as a functional executive for all stores, but has line authority over the men working in the advertising department, some of whom prepare illustrations, some write the text for advertisements, while

still others build window and interior store displays. The chief accountant serves as functional or advisory officer to store managers and the supervisors of groups of stores and has line authority over the employees in the central accounting office, who prepare

CHART 18

ILLUSTRATION OF LINE-AND-STAFF ORGANIZATION



accounting record forms for all stores, receive daily and weekly reports from stores and groups of stores, and summarize and tabulate results.

Variations of the line-and-staff type of organization are common in business, since it tends to maximize the advantages of both the

line and the functional forms while it minimizes their disadvantages. It is the form of organization used in the modern army which employs specialists to serve and advise all military units, and yet retains line authority within each specialized division.

Committee Organization. The committee form of organization represents a modification of the line-and-staff form of organization, wherein advisory or functional duties are performed by committees rather than by individuals.

The use of committees in this manner supplies three significant advantages. First, it encourages the combination of experience and skill in solving operating problems. Second, it is a useful device for securing coordination between functional officers at the same rank, who might otherwise be disposed to operate at cross-purposes. Third, the committee is impersonal, in the sense that its judgment cannot be traced to an individual. It encourages a broad view and induces a disposition away from personal bias and petty obstinacy.

Committee organization has been found to be an effective way to promote cooperation at all levels of the organization by the simple device of forcing the debate of contrasting views and the conclusion of a unified position which represents the compromise of group opinions. A wider appreciation of the problems of the various divisions of the business may be secured through committees representing several departments.

In using the committee form of organization care must be taken lest the groups degenerate into debating societies. Effective committee organization encourages the exchange of contrasting points of view, but also makes provision for reaching conclusions on the basis of which action may be initiated and strongly prosecuted.

ADMINISTRATIVE ORGANIZATION AND HUMAN RELATIONS

All of the forms of organization described in this chapter must be regarded as devices for securing human collaboration. The human relationships in any concern are a necessary part of every organization plan. They influence every form of organization and, in many cases, dictate the use of one form of organization rather than another.

Human Relations in Business. Study of the effects of human relationships on problems of coordination and company loyalty

has been undertaken for the first time in recent years. Although the research programs are still in their early stages, it is becoming apparent that business managers have often been mistaken in emphasizing organization techniques and wage-payment systems as the sole essential features of effective cooperation within an enterprise. The talents, prejudices, and preferences of individuals make significant contributions to the operation of every business concern, if means are provided through which they can be fully utilized without creating dissatisfactions, antagonisms, and frictions. Misused, they will destroy the efficient functioning of any organization.

A story is told about Charles Steinmetz, an electrical genius employed for many years in the research laboratories of the General Electric Company, who loved to smoke while he was working. When he was informed that smoking in the laboratories was contrary to company policy, he is reputed to have replied calmly, "All right, no smoke, no Steinmetz," and prepared to leave. Mr. Steinmetz was allowed to smoke, and he stayed.

Social Cooperation. It is not only a question of individual attitudes. Groups of employees have social organizations of their own devising within the frame of the operating organization of a concern. To a large extent, effective collaboration of employees can be secured only by working through and with individual and social organizations within the company. Failure to do this has been a fruitful cause of breakdown for schemes designed to increase efficiency. It has been the source of the ineffective leadership of executives. It has been the source of an absence of company loyalty.

The little knowledge which has been accumulated so far about this extremely interesting and important subject serves to emphasize one thing. The managers of business must realize that a form of organization for administration cannot be devised and put into operation without reference to problems of human adjustment. Further, if organization theory comes into conflict with personalities, it is usually the part of wisdom to let personalities and abilities determine that form of organization to which they can adapt most effectively and in which they can work with a minimum of friction and private discontent.

THE POSITION OF THE EXECUTIVE

Inasmuch as all authority in any organization ultimately rests with the executive head, it is important to describe the relation of the executive to his organization, and to tell how he uses the organization as a management tool and cooperates with it.

The executive head of a business (who may be called the "chairman of the board," "president," "executive vice-president," "general manager," or by some similar title) is the pivot upon which the enterprise must turn. He is the activating center of a complex of human relationships, organization procedure, and technical processes. He is the director of all activities, the initiator of policies, the arbiter of disagreements, the final court of appeal from all lower judgments. His responsibility is divided between the owners of the business, its employees, its customers, and the society in which it operates.

Types of Executives. There are almost as many types of executives as there are company officers. Some executives attempt to centralize all responsibility in their own hands; others prefer to delegate responsibility to divisional officers, judging performance on the basis of results achieved. Still other executives operate in an intermediary zone between the two extremes. Some executives work closely with their organizations, others remain aloof, relying on the impartial attitude which they hope to secure from a broad view of company affairs.

Whatever the executive's attitude toward his organization, it is clear that the major part of his work is creative with respect to the broad company policies which his organization will follow. Whether his contact is immediate and direct or removed and indirect, whether responsibility is centralized or decentralized, makes little difference. He operates with respect to his organization in the way dictated by his own talents and personality, but, in any case, he cannot escape the central responsibility for basic policy and for the determination of the form of administrative organization which will carry out the details of that policy. Within this framework the executive functions in a variety of ways in different companies.

Executive Functions in Business. The making of executive decisions is not necessarily the sole distinguishing mark of the executive in business. In some types of organizations the execu-

tive may be relieved of much of the detail involved in everyday decisions. The extent to which he is concerned with daily decisions is determined largely by his own choice of organization form and by the extent to which he desires to delegate the power to make decisions to the members of his organization. His idea of his relation to the organization, therefore, is one of the most important functions which any executive director must undertake to resolve.

In looking upon his own business organization, the executive head usually begins with a solid belief in the fact that an organization produces more as a unit than the total production of each member of the organization operating independently. To illustrate this statement,[1] let us assume that five men, A, B, C, D, and E, have spontaneously created an organization for the purpose of gathering firewood. Let us suppose that their aggregate efforts, when each concentrates on part of the task, are valued at $20 per day, or $4.00 per man. Working independently, A can gather firewood valued at about $3.75 per day; B, about $3.50; C, about $3.00; D, about $2.70; and E, about $2.25. Initially, the inducement to cooperate lies in a promise of securing an equal share in the product of the organization of all five men, that is, $4.00 per day per man. It is clear that each man will profit by cooperating, although the amount and proportions of the individual's profit will differ. Certain other factors might be mentioned. A, an individualist, dislikes the restrictions which cooperative effort imposes on him. C, on the other hand, is pleased by the opportunity of working in a group. Thus it is clear that the physical and economic advantage of cooperating is offset by personal disinclination for A, and made attractive by personal inclination for C.

As a result of the cooperative effort, other changes follow. A who works harder than B, thinks that he should have a larger share. Since they have agreed to share equally, A decides to put forth less effort. At first this may cause no great change. Perhaps C, who enjoys cooperative work, may work harder to compensate for the loss resulting from A's attitude. Eventually, however, these personal inclinations and disinclinations toward cooperative work may result in frictions within the group. Others may object

[1] The illustration is drawn from *The Function of the Executive* by Chester I. Barnard, Harvard University Press, 1938, pp. 246–248.

and at last C may conclude that unless some changes are made, the cooperative effort will break down. He may conclude that A is the strategic factor in the situation and that F, who may be a poorer worker than A, should be substituted in order that the group as a whole may continue to function.

For a time, under this new arrangement production goes along even better than before. The productive unit formed by these individuals seems so attractive that others wish to join the group. The members of the group decide, however, not to admit others. After a while, C concludes that, since he has been the strategic factor in maintaining the operation of the organization, he should have a larger share of the earnings. He may be so persuasive that B, D, E, and F agree that C shall act as their leader and receive a larger return.

It is possible, however, that as a result of this change in the organization, frictions and difficulties develop. The material share of the others may decline, perhaps so far that each man is obtaining less than he could by working independently. The organization may remain intact largely because of the satisfaction which the members find in cooperative work, but they may grow slowly dissatisfied with their decision to accept C's orders.

Suppose then, that B dies, and that C employs G to replace him. G is a poor workman. He is willing to accept a low rate of pay, but does not contribute much to the group and helps to create a very unsatisfactory situation. The others threaten to quit. C concludes that the only way to hold the organization together is to enlist the energies of the workers in a new project which may increase the individual return. He suggests that to the gathering of firewood be added the cutting of cordwood. He convinces E, F, and G that this is a desirable project. D, however, drops out of the organization, and H replaces him. Since some time may pass before the organization can effectively cut cordwood, C may be forced to induce I to support the individuals until the group is ready to produce in volume, and agrees in return to give I a share of the proceeds when the project is fully under way. The organization has then reached this stage: C contributes his own effort plus managerial services; E, F, G, and H contribute manual labor; and I contributes material.

From this illustration certain conclusions may be drawn. First, the production of the organization as a whole is clearly in excess

of the sum of the production of the individuals working independently. Second, in addition to the material gain, certain of the social aspects of group coordination are attractive to many individuals. Third, the contribution of C in his managerial capacity is of material influence upon the group and represents a real gain, even though he contributes to the work only the average amount of energy. Fourth, C, in his capacity as manager, is perhaps the single most essential individual in the group, since C's withdrawal might lead to the dissolution of the entire organization. Fifth, the organization as a whole depends directly not only on C's managerial ability, but upon the willingness of the others to cooperate effectively under C's direction in the output of a group product.

If, in this entire organization, any one feature were to be selected as the very essence of group action, it might well be that of effective coordination. If this factor is selected, then it is clear that the executive who makes possible the coordination by planning it and by supervising it bears a very close relation to the survival of the group as an efficient productive unit. This is the primary task of management. Clearly, it is central in the organization. It is intimately related to the functioning of the organization plans. It directs the organization. It has the end result of making the organization of individuals a more effective productive unit than could be devised in any other way through independent action.

It is in this way that the organization of business administration can be regarded as a tool of management. It collects, guides, and controls even as accounting and statistics aid in collecting and organizing facts. Like all other tools, its best use is in the hands of a wise administrator. Unguided, it is worthless. It does not dictate. It can only serve.

DEFINITIONS

Committee organization. A modification of line-and-staff type of organization relying on committees for the performance of advisory functions.

Functional organization. Administrative organization relying on specialization of directive effort by functional tasks.

Line-and-staff organization. Organization which combines major features of line and functional types, utilizing functional divisions for basic activities, but retaining line authority within each division.

Line organization. Organization which passes all lines of authority vertically from president through junior executives down to common laborer.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What two relationships must every man in every organization know and understand if he is to act authoritatively and responsibly?
2. Why is not monetary gain sufficient incentive for an employee?
3. What is the best test of the value of an organizational plan?
4. Why is it sounder for an organizational structure to obligate an employee to follow the directions of a single superior rather than several?
5. Is preparing men for advancement in the organization a short-run or long-run program? Why?
6. Define the line type of organization.
7. In what basic respect does the functional organization differ from the line organization? What is its chief defect?
8. The committee organization is well established. Why is it so well established? What are its peculiar advantages?
9. Among whom are the responsibilities of the executive head of a business divided?
10. Name and describe the primary task of management.

B

1. What is the difference between the authority and the responsibility of a business executive? Take, for example, the sales manager of a large corporation and explain the difference in his case.
2. Granted that coercion is not, in the long run, an effective device for an employer to use in his relations with his employees, what can be said for its use by employees in their relations with their employers? Keep in mind the fact that labor unions always use a measure of economic coercion, and sometimes physical coercion, in forcing employers to accept their demands.
3. Does the ordinary corporate structure satisfy the definition of authority and responsibility suggested in the text? What is the authority — in general terms — of an ordinary member of the board of directors? What is his responsibility?
4. If a company tries to show its laborers the advantages of a company union over an independent union, is it educating or propagandizing?
5. Keeping in mind the fact that the basic test of business organization is that each member knows clearly the scope of his authority and his responsibility, compare the four types of business organization from that point of view?
6. It is often asserted that the prime objective of any member of the economy is to make money? Why, then, is not a satisfactory wage sufficient to promote cooperation of the employees in an enterprise? Why should an employer bother with other considerations?
7. Is the manager of an enterprise who indicates interest in the problems of human adjustment confronting his employees attacking the problem of production from a long-term or short-term point of view? Why?

8. Remembering that the head executive has certain basic responsibilities to discharge to many groups, should he limit sharply the discretionary power which he delegates to subordinates? Is absolutely free delegation of discretionary power apt to result in a more efficient or less efficient economic unit in the long run?
9. We know that a shrewd manager will always urge his employees to subordinate their personal interests to the interests of the company. Looking at this matter solely from the employee's point of view, can we say that it is profitable for him — in the long run — to follow the manager's dictates? Or is it a more intelligent policy for the employee to be primarily interested in how much money he is making now and will make in the immediate future?

C

1. Relying chiefly upon your general knowledge of the governmental structure of the United States, draw a chart of the executive department of the Federal government, indicating what type of organization it most nearly resembles.
2. Write a 1000-word essay making out the case for or against company unions, company-sponsored employee athletic programs, and company-sponsored employee social programs.
3. Assume that you are appointed by a group of wealthy capitalists to plan the organization of a large shoe factory which they are about to open. Submit a report indicating what departments you would establish, what kind of executive structure you would suggest, etc.

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Cornell, W. B., *Organization and Management in Industry and Business*, The Ronald Press Company, New York, 1936, Chaps. 3-5.

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CHAPTER 12

ECONOMIC RELATIONSHIPS

From the standpoint of the business manager, two sets of relationships are of major significance. The first is the relationship of the component parts of an individual business enterprise. Previous chapters have discussed some aspects of this particular set of relationships and of the tools which the business manager uses in trying to organize, control, and coordinate them. It may even be possible to offer as a temporary conclusion to this section of the discussion (which will be amplified later in this book) the judgment that substantial progress is being made in the efficient administration of this set of relationships. The tools have been devised. Business managers have been learning how to use them. Within the modern well-managed enterprise a high level of efficiency is often attained, and the attack on waste is pursued intensively.

The second important set of relationships is that which exists between one enterprise and another, between an enterprise and its customers, and between all the economic units which make up the society in which we live. If we study relationships in this area we often discover what can only be described as a lack of effective coordination. The individual parts of a well-run business function more smoothly and efficiently than do the individual parts of the economic world as a whole. Waste is everywhere. Instances of work pursued at cross-purposes are frequently encountered. Connections between units are too tight or too loose. The joints do not fit together smoothly.

And yet, as we survey the complex economy, we are also aware of tremendous accomplishments, despite poor coordination, and of even more impressive potentialities. Some persons, looking at this power and the accompanying waste, want to destroy the system as a prelude to remodeling it. Others are more curious about the cause of the dislocations. They believe that a better understanding of the sources of difficulties may aid business men to secure the same coordination between one concern and another,

or between a concern and its customers, which men have learned how to induce within enterprises.

These relationships between one firm and another, and between a firm and its customers, are often referred to as "economic relationships," or as the "relations of economic units." The present chapter will be devoted to a discussion, on a simple level, of some of the more important of these economic relationships. It is only by an understanding of such relationships that business men can hope to resolve the frictions which create waste effort in our society.

THE SIGNIFICANCE OF ECONOMIC RELATIONSHIPS

Earlier chapters have emphasized repeatedly that the economic system in which we live is an arrangement of relationships between people and between things. It is not a machine. It is a living, changing, dynamic pattern of interrelated parts. The wastes and the inefficiencies of the system arise in large part as a result of the rapidity and the unpredictability of change. To the extent that business men can discover the reasons for change, they gain in ability to predict change. This measure of understanding about the nature of economic society is the first substantial step toward securing coordination *between* economic units similar to the coordination now secured *within* economic units.

The problem can be phrased in the simplest terms. Why do business men behave as they do? Why do business firms behave as they do? Why do workers and consumers behave as they do? What economic principles underlie their actions? This knowledge can be regarded as a tool of business management useful in collecting and organizing ideas about economic units. It is one of the series of tools of business management we have been discussing.

One Example of Economic Relationships in Business. To illustrate the significance of securing some understanding of the principles underlying economic behavior, consider the following situation.

The X Company, a manufacturer of small automotive parts, secured the patent rights covering a new type of mechanical refrigerator. The refrigerating unit, which was the important patented development, incorporated a principle hitherto unused in the production of mechanical refrigerating units, and one that would be both simple and inexpensive to manufacture. The

company planned to manufacture the refrigerating unit in its own plant. The box in which the unit was to be placed would be produced by another company with which satisfactory arrangements had been thoroughly discussed and a tentative contract outlined.

Executives of the X Company were undecided at what price the refrigerator should be sold to consumers or what should be the margin granted to retailers. A number of companies were well established in the refrigerator business, selling refrigerators at prices ranging from $100 to over $300. A large number of manufacturers were concentrating on machines selling in the price range between $100 and $160. Prices of refrigerators had fallen substantially in the preceding three years.

Because of the unusually low manufacturing cost for the refrigerating unit, the advantageous arrangements which had been completed for the manufacture of the box, and the decision to produce only one size of unit and to standardize equipment in all boxes, executives of the X company believed that total manufacturing and selling costs for their product would not exceed $75 per refrigerator when annual production was less than 25,000 units. Unit-production costs might be expected to decline to $50 if production reached 100,000 refrigerators.

Marketing costs to be incurred by the X Company, including sales-force expense, advertising, storage, and transportation, were estimated at $25 per unit when annual production was less than 25,000 units. With an annual production of 100,000 refrigerators, marketing costs might be expected to decline to $20 per unit. Thus, with an annual production of 25,000 refrigerators, total production and marketing costs (including profit) would be about $100 per unit; at the 100,000 unit production rate, total costs would be reduced to $70 per unit.

Making an allowance for retailers' margins, it was evident that the minimum selling price to consumers would be $130 per refrigerator at an annual volume of 25,000 units, and $95 per refrigerator at an annual volume of 100,000 units. Since it was assumed that at least 100,000 units could be sold during the first year, the $95 price was accepted as a fair minimum.

With the conclusion of this stage of the analysis, however, disagreement arose between the executives. All agreed that the number of refrigerators which could be sold depended, in part,

on the retail price. Sales would vary inversely with prices; less would be sold at a high price than at a low price. The executives could not agree, however, about the direct relation between prices and sales. If 200,000 refrigerators could be sold at a unit price of $100, how many could be disposed of at $125? One hundred seventy-five units? More? Less?

These questions were not easy to answer. Yet some attempt must be made to evolve an answer, in order that a satisfactory price might be determined in a rational manner. Furthermore, the pricing problem was not confined to this discussion of retail price. Discussion arose about possible repercussions in the schedule of competitors' retail prices. If the X Company selected a retail price below the general level of competitors' prices, what action would competitors take? Would they reduce their prices? Or would they ignore the new competition? If they should decide to reduce their prices, to what level would they drop, and how would that affect the potential sales of refrigerators? If they ignored the new refrigerator at first, would they continue to do so? If so, for how long? What effect would this have on the sales (and future price) of X refrigerators?

All these, and similar, questions could be analyzed by the executives of the X Company only in terms of their understanding of the principles which underlie all economic relationships. It is to the description of some of these basic principles that the balance of this chapter will be devoted. Specifically, discussion will center on the concepts of demand, supply, and price. These are not subjects for economists alone. Every business man must regard this knowledge as one of the tools of his trade. It is the key to his understanding of economic behavior, without which the actions of individuals and business units become incomprehensible and unpredictable.

THE LAWS OF EXCHANGE

It should now be clear that the chief characteristic of our economic system is the process of exchange which we call "selling and buying." In primitive societies using the barter system goods were exchanged directly for other goods. Specialization and division of labor in the modern industrial economy have made the process of exchange by barter clumsy and inconvenient. The modern process of exchange depends on the use of money. Goods

are no longer exchanged for other goods, except in a few scattered rural areas. Goods are exchanged for money; and at some other time, in some other place, money is exchanged for other goods. The manufacturer sells goods to a retailer in exchange for money. The retailer's customers secured that money by exchanging their services (as factory workers, clerks, truck drivers, professional workers, etc.) for wages paid in cash. This exchange process which may be expressed by the following diagram——G⟷M⟷G—— is the essential process of modern industrial society.

Significant Factors in Exchange. Study of the exchange process makes it readily apparent that there are always present three significant factors: (1) demand; (2) supply; (3) price. In their efforts to understand economic relationships, business men are constantly engaged in measuring and evaluating these three factors, and in attempting to work out brief statements of principles which can be relied on as standards of behavior throughout the business world.

It is, perhaps, misleading to refer to these principles of economic behavior as "laws" of exchange. Economics is less a science than a fine art, and its laws do not possess the quality of universal truth which we expect to find in the laws of science. But as summaries of economic behavior they are usually accurate and always suggestive in interpreting the behavior of economic units. If we content ourselves with using them as indications of tendencies rather than as exact measures of movements, they may be employed as a reliable basis for business men's reasoning.

Significant Principles of Exchange. The more significant of these principles will be stated briefly at this point, and explained at length in the following pages.

1. The demand for a commodity responds to changes in its price. Ordinarily, the lower its price, the greater the demand.
2. The supply of a commodity also responds to changes in its price. Ordinarily, the higher its price, the greater the supply.
3. When the quantity of a commodity which buyers are willing to purchase at a given price exceeds the supply at that price, its price tends to rise.
4. When the quantity of a commodity supplied at a given price exceeds the quantity which buyers are willing to purchase, its price tends to fall.

5. The price of a commodity tends to move to a level at which the quantity which buyers are willing to purchase is equal to the quantity sellers are willing to supply.

These laws of exchange are the foundation of all reasoning about economic behavior. They apply to all types of commodities, at all times, in all places. They are applicable to money as well as to goods; they are even applicable, in the long run, to labor.

But these highly condensed statements require explanation. Something must be said about the nature of demand, supply, and price; about what ideas these words convey to the business man; and about the reasoning process which guides his thinking when he considers demand, supply, and price. Let us begin with an attempt to describe the nature of demand. Again, it should be emphasized, no effort will be directed toward providing a complete technical discussion on the level of economic theory. Put the problem in its simplest form. What should the business man know about demand?

THE NATURE OF CONSUMER DEMAND

Two things make up the demand for a product: (1) desire to purchase; (2) ability to purchase. Ability to purchase is measured by buying power in the shape of money. Desire to purchase and ability to purchase together determine how much of the product people will buy.

It is obvious that the quantity of a product which consumers want to buy will not be the same at all prices. The common assumption is that people will buy less of a product if the price is high than they will buy if the price is low. Economists have entered into a number of extended explanations for this common assumption, which it would not be profitable to reproduce at this time. The following explanation may be sufficient for the beginning student of business.

Variations in Demand. Three reasons may be cited to explain the common observation that for most products the lower the price, the more that can be sold: (1) variations in consumer incomes; (2) variations in consumer preferences or desires; (3) diminishing strength of the desire for a product when tastes have been partially satisfied.

Differences in purchasing power restrict the demand of some

consumers more than others. The office boy on a weekly salary of $15 wants to buy an automobile, but cannot afford one. His employer, earning $100 per week, owns an automobile in which he drives to work from his home in the country. He cannot afford the second car which he would like to buy so that his wife could have ready transportation for herself and the children. The wealthy man may own two cars and never worry about operating expenses. If his income were larger, or the prices of automobiles lower, the office boy would buy a car. So, too, his employer would buy a second car. Neither an increase in his income nor a reduction in prices would induce the wealthy man to buy a third automobile. Two are sufficient for his needs. He has no use for a third.

This illustration of variations in demand caused by differences in consumer incomes can be duplicated for most of the commodities people buy. Given larger incomes (or lower prices, which have the same effect on purchasing patterns), most people would buy goods which at present they cannot afford, or would buy a greater quantity of those goods they now purchase in small amounts.

Even if people's incomes were all equal, however, variations in personal preferences and desires would lead to variations in the purchase of various types of goods and services. Baseball games hold a tremendous fascination for some people. They would attend a game between two major-league teams even if tickets were $3.00 each. Others like to watch ball games, but their enthusiasm is modified by the price of tickets. They will not pay $3.00 but would be glad to go if the price were lowered to $1.00. Still others get no excitement out of a baseball game. They can be induced to go only if it costs no more than 25 cents.

Again, the illustration of variations in demand caused by variations in personal preference can be duplicated for almost every type of goods or service. The lower the price, the larger the quantity which is purchased, in this case because people with less strongly marked attachments become willing to buy.

But even with universal similarity of both incomes and preferences, there would still be variations in the quantities of a commodity which could be sold at various prices. This can be explained in terms of the diminishing attractiveness of added units of the same product.

If a man were on the verge of starvation, and no other food were

available, he might be willing to pay several dollars for a loaf of bread. If the seller offered him a second loaf, he would be willing to buy it, but only at a lower price. To induce him to buy a third loaf, yet another drop in price would be necessary. A similar illustration might be drawn in terms of the sale of one ton of coal to a family caught without fuel in the winter's first cold wave. The sale of successive tons could be made only at progressively lower prices.

The principle suggested by these illustrations may be expressed in general terms. When a product is offered at a high price, people purchase only to satisfy their most intense needs or desires. A high price will defer the purchase of added units once the immediate need has been met. People will buy to satisfy less urgent desires only at lower prices. People receive diminishing pleasure, or usefulness, from added units of a product. This is often referred to as the "law of diminishing utility." Again, it is clear that more goods will be sold at a low price than at a high price.

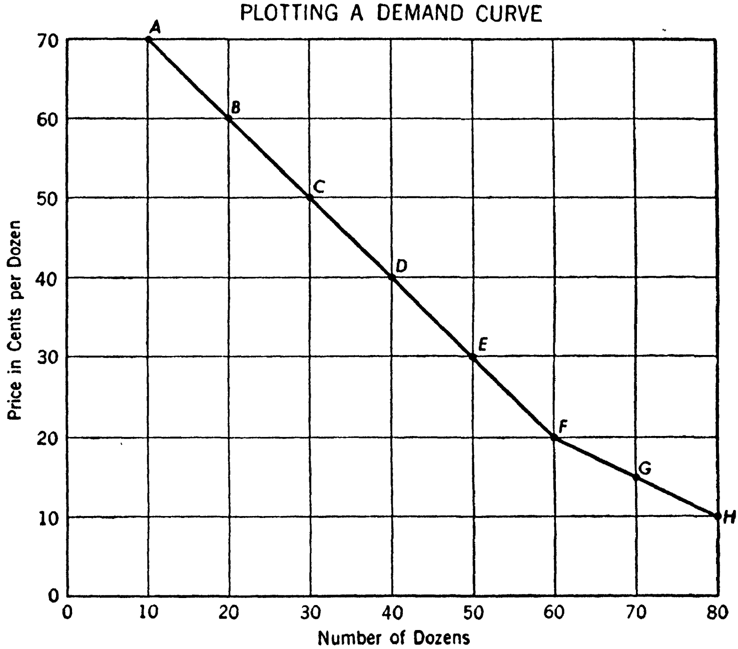
The Demand Curve. The general principle which describes the relation between price and quantity purchased can be presented graphically. We can construct a diagram on which quantity purchased is measured along the horizontal base line and prices along the vertical line. On this diagram, let us undertake to plot the number of dozens of oranges which can be sold at various prices in one day by a small fruit market. At the price of 70 cents per dozen only a few of the wealthiest customers can afford to buy oranges, and they will limit their purchases to 1 dozen each. Let us suppose that 10 dozen in all can be sold. Insert a dot at the intersection of the horizontal line measuring 70 cents and the vertical line measuring 10 dozen (point *A* on the chart). At 60 cents per dozen, several more shoppers will purchase, and a total of 20 dozen may be sold. Insert another dot opposite the price of 60 cents and above the quantity 20 dozen (point *B*). At progressively lower prices, more and more oranges can be sold, the demand increasing for all three reasons described in the preceding pages. If a series of dots were plotted on the chart to indicate the number of dozens which could be sold at each price down to 10 cents per dozen, and a line drawn through the dots, connecting them, the resultant curve would look like the one inscribed on the chart. This curve may be called the "demand curve" for oranges in the fruit market. Because this is a convenient way to describe graphically the demand

for any product, economists and business men often use this technique and speak of the demand curve for oranges, automobiles, radios, or any other commodity or service.

Relative Satisfactions. Another observation must be added to this description of consumer demand. The intensity of a person's desire for a commodity depends on what other commodities are available, the prices at which they are offered, and his appraisal of the relative satisfaction to be derived from the purchase of one commodity rather than another. A student may spend a dollar on

CHART 19

PLOTTING A DEMAND CURVE



a football game, two week-end dances, or four trips to the movies. If we disregard the influence of his friends and his desire to go wherever they decide, he must choose his pleasure largely on the basis of his appraisal of relative satisfactions. Almost every purchase of goods or services represents such a selection between contrasting possibilities. The consumer's aim is to get the greatest satisfaction out of the spending of his income. He spends each dollar for that commodity which, in his opinion, provides the greatest satisfaction.

It should not, of course, be assumed that consumers make a

rational analysis of potential satisfactions before every purchase. Many satisfactions cannot be accurately measured or equated to a specific expenditure. But the principle is generally true as a description of tendencies in purchasing habits.

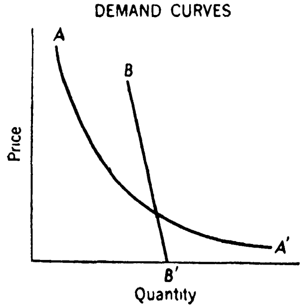
Elastic and Inelastic Demand. Some qualification must be made of the common assumption that the higher the price of a commodity the less that can be sold. This is generally true of practically all commodities and services. But it is more true of some commodities than of others, and there is a small group of commodities the demand for which appears to respond little, if at all, to changes in the price.

For some commodities, a small decrease in price will cause a larger variance in sales. For others, a similar decrease in price will be followed by a small variance in sales. The degree of responsiveness of demand to price changes is usually called the "elasticity" of demand. In order to provide a standard measure of elasticity, the demand for a commodity is said to be elastic if a 1 per cent change in price brings about a change of more than 1 per cent in the amount purchased. It is said to be inelastic if a 1 per cent change in price causes a change of less than 1 per cent in the amount purchased.

It has been generally observed that the necessities of life often have an inelastic demand. The demand for salt is often selected to illustrate this point. A necessity for the preservation of life, yet a commodity which takes only a small part of the food budget, relatively large changes in its price, up or down, would not be followed by any noticeable change in the amount purchased. Graphic representation of elastic and inelastic demand curves is offered in the following chart. The line A-A' represents an elastic demand, with a substantial increase in the amount which will be purchased at successively lower prices. The line B-B' represents an inelastic demand, with only a slight increase in quantity purchased following a sharp drop in price. Movement from the top to the bottom of the vertical price scale is accompanied by a small increase in quantity sold, as measured along the horizontal base line.

CHART 20

ELASTIC AND INELASTIC DEMAND CURVES



THE NATURE OF SUPPLY

The general statement about supply which corresponds to the discussion of demand which has just been concluded is that the amount of a product which will be offered for sale varies directly with the price. The higher the price, the greater the supply which will be offered for sale. Conversely, the lower the price, the smaller the supply which will be offered for sale. Supply, in this sense, refers to the amount of a commodity which will be offered for sale at a given price.

Supply and Cost. Because business men are in business to make a profit, there is an important relation between the supply of goods and the cost of producing those goods. This relation must be examined from several sides. On the whole, supply conditions tend to depart more frequently and to a greater extent from the general rule governing demand and price. Let us start with the general rule, and then attempt to note the departures.

In the first place, each economic unit will normally attempt to sell as much of its product as can be disposed of at a profit. Cost of production is an important factor in the calculation of the profit range. As long as selling price is in excess of the cost of producing the last unit turned out, it is advantageous to supply more goods. When selling price declines below the cost of the final unit, it is desirable to decrease the amount supplied.

Short-run Supply. The first departure from the general rule must be noted in the distinction between short-run supply and long-run supply. When a producer has finished the manufacturing or the growing process and his merchandise is ready for sale, usually he must offer it for sale at once. He must sell even if price is below cost of production. The short-run supply — the supply which is offered for sale now — does not depend on the relation between selling price and cost of production. It is true that if the price is very low, the producer may refuse to sell and put the goods in storage. But not all producers have this choice. Some commodities, such as fruits and vegetables, are perishable and cannot be stored. Other commodities, such as women's dresses and hats, are subject to style changes which may reduce their value rapidly and so make storage hazardous. Many producers, including most farmers, need cash in a hurry, and so must sell their goods immediately, no matter what the price.

In the short-run period, therefore, the supply of commodities usually is whatever has already been produced. There is little relation between price and the amount offered for sale.

Long-run Supply. In the long run, however, there is an observable relation between the amount of a commodity that will be produced and the price for which it can be sold. No business can continue to sell below cost year after year. In the long run the amount supplied will respond to prices, a high price tending to call forth a greater supply, a low price tending to decrease the supply.

To understand the business reasoning behind these supply-price reactions, it is necessary to enter into a discussion of costs of production. Specifically, a distinction must be drawn between two types of costs which are found in every productive process. These two types are commonly described as "variable" (or direct) costs, and "overhead" (or indirect) costs.

Variable Costs. Variable costs of production are those costs which tend to change in the same direction as does the volume of production. Some of these costs vary directly with changes in output. Other costs do not vary in just the same proportion as output, but do tend to increase when the amount of goods produced increases, and decrease when the amount of goods produced is reduced. The general relation between this type of cost and the volume of goods produced can, therefore, be simply stated. The more that is produced, the higher the variable costs; the less that is produced, the lower the variable costs.

What specific cost items behave in this way? Expenditures for raw materials and for factory labor usually vary in direct proportion to the volume of goods produced. They do not always vary in exactly the same proportion, however. An increase in production may necessitate the employment of labor for longer hours at overtime rates of pay. Or it may force the factory manager to hire less efficient, or untrained, workers who turn out fewer units during each working hour. In these instances, an increase in production would be accompanied by a *more* than proportional increase in labor costs. Other examples might be cited in which an increase in production is secured with a *less* than proportional increase in labor costs. This might follow an increase in factory work which made possible a greater division of labor, specialization

of each employee on a single task at which he could rapidly become expert, resulting in higher productivity for every worker.

Whatever differences may be discovered in relative movements of costs and output, it can be observed that it is the nature of variable costs to increase and decrease as output increases and decreases. Changes in variable costs do not always exactly parallel changes in the volume of production, but they always move at about the same time and in the same direction. Variable costs are often referred to as "direct" costs because they are incurred directly in connection with production.

Overhead Costs. There are other costs incurred in production which do not vary in proportion to changes in the volume of output. These costs often change little, if at all, when the volume of production is increased, and many of these costs are unaffected even by a complete shutdown of operations. In this classification of costs may be included rent for factory buildings, many types of taxes, the salaries of supervisors and executives, and depreciation charges (provision for the eventual replacement of worn-out or obsolete machines, tools, or other equipment).

These changes are unaffected by changes in the volume of production. Speeding up or slowing down, even complete stoppage of operations, do not influence them. The rent continues, whether the plant operates or stands idle. So do many taxes. The essential employees of the organization must be held together in times of slack business, or the business may find itself stripped of skilled and experienced executives when operations increase. The same supervisors are capable of directing a larger volume of business with no increase in either their number or their remuneration. Depreciation charges continue at all levels of production. Machines become obsolete just as fast when idle as when working 24 hours a day.

Overhead costs are often referred to as "indirect" costs because they are not incurred in direct connection with the level of productive volume, but have only an indirect relation with production. They tend to remain unchanged at all levels of production.

Selling below Cost. The phrase, "selling below cost," can now be seen to have a real meaning to the business man. Suppose a factory to have a burden of overhead charges amounting to $10,000 a month even when the plant stands absolutely idle. The manager is offered a contract to turn out a month's supply of his product if

he will assume the contract at a very low price. He calculates the variable or direct costs of manufacture for the month and discovers that raw materials, labor, light, heat, and power and similar variable charges will amount to $25,000. He is offered $30,000 for a month's output, when total costs of production (variable costs plus overhead costs) amount to $35,000. He will lose money, at the rate of $5000 a month, to be exact. But consider the alternative. If he refuses the contract, the factory stands idle, running up overhead costs at the rate of $10,000 per month. It is apparent that he can reduce his loss by accepting the contract, even though the contract price does not cover total production costs.

This illustration may suggest why, in the short-run period, the manager of a factory with idle capacity may be willing to accept any contract which offers more than the variable costs of filling the contract. Any surplus over and above the sum of the variable costs of producing the goods specified in the contract helps to support the burden of overhead charges. Although he cannot make a profit until his income is in excess of total costs, he may, by accepting such a contract, minimize his losses.

Total Costs. In the longer period, however, over the course of years, no business can continue to accept less than the total costs of production without ending in failure. In the long period, therefore, it is reasonable to accept the postulate that a high price tends to increase the supply of a product. A high price induces managers of existing factories to operate their plants at capacity, even to the extent of adding a second or a third shift of workers to keep machines in use throughout each 24-hour period. It induces the owners of old, outdated factories with obsolescent machinery, which may have been standing idle for years because of their high level of production costs, to put their factories into operation again. And it induces still other business men to enlarge existing factory space or to erect new factories, to take advantage of the profit possibilities held out by the existing high price.

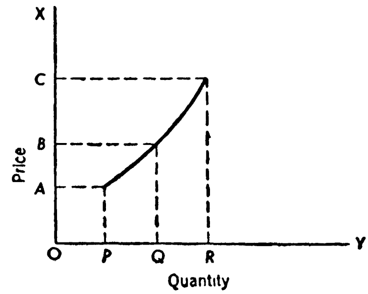
In contrast to these effects of a continued high price, a protracted low price may lead to the shutdown of inefficient, high-cost factories, and the reduction of output in other plants, so that the total supply is materially reduced.

Supply and Price. This relation between supply and price can be graphically portrayed in the same way as the demand-price relationship. The following chart, representing the supply curve

of a product responding to price changes, is set up with the same horizontal and vertical measures as the earlier chart of a demand curve. Price is measured along the vertical line *OX* and quantity along the horizontal line *OY*. At the low price *OA*, the quantity *OP* will be supplied. At the higher price *OB*, there will be an added inducement for producers to increase output, and the greater supply *OQ* will be produced. If the price increases to *OC*, still greater inducement is offered to producers, and, after a time, the increased supply *OR* will be offered for sale.

CHART 21

PLOTTING A SUPPLY CURVE



THE NATURE OF PRICE

The foregoing discussion of demand and supply has been entirely concerned with their general reactions to different prices from the lowest to the highest. This introductory statement cannot be regarded as complete until we have added a comment on price itself. Demand and supply conditions have been described as they reacted to price changes. But what makes prices change? Do prices move at random? Are there specific causes for price changes? If so, what are they? And how do they operate on prices?

These are not easy questions. At first glance, they would appear to lead the reader in a circle. For the economist's answer to the business-man's question might be merely, "Price is determined by demand and supply." And this, we have a right to say, leads nowhere, like the universal question, "Which came first, the hen or the egg?"

It may be helpful to begin by thinking of prices not only as cause, but also as result. Prices are the results of demand and supply conditions; this we know is true. And prices are the causes of changes in demand and supply conditions; this, too, we know is true. There is a continual triple relationship between demand, supply, and price, in which changes in any one may be the cause of changes in the other two, which in turn may cause further changes, and these in turn cause others.

In examining such a complex relationship, it matters little

whether one starts with demand or supply or price. For convenience, this discussion started with demand and supply. It might, with as much logic, have begun with price.

Price as the Equalizing Factor. Starting with a definition of demand as the amount of a commodity which will be purchased at various prices, and supply as the amount which will be offered for sale at various prices, we may define the relation of price to demand and supply in these terms: the price of a commodity tends to move toward that level at which demand and supply are equal. If the price should be above this point (bear in mind that a high price tends to reduce demand and increase supply), the potential supply will be greater than the potential demand, which will tend to reduce the price. If the price should come to rest below the equilibrium point (bear in mind that a low price tends to increase demand and reduce supply), the potential demand will be greater than the potential supply, which will tend to lift the price.

Above the equilibrium point (where quantity supplied equals quantity demanded), supply tends to exceed demand. Sellers compete for customers. In their competition, they offer reduced prices as inducements to purchase. The price tends to fall. Below the equilibrium point, demand tends to exceed supply. Buyers compete for an inadequate supply of commodities. In their competition, they offer higher prices for available merchandise. Price tends to rise.

An understanding of these general statements of demand, supply, and price relationships is helpful to the business man. He relies on them to organize his thinking about the behavior of economic units in our society. A further statement is necessary, however, to draw this general description closer into line with the actual pattern of business action.

BUSINESS USES OF ECONOMIC PRINCIPLES

When we have proceeded this far in the analysis of demand, supply, and price, a number of questions are probably waiting to be answered. In the first place, is this description theoretical, or does it actually apply to the daily operation of business affairs? Second, these are described as "laws" or "principles": can the business manager rely on them as we commonly rely on the truth of the "law of gravity"? Third, is an understanding of economic

principles, as described in this chapter, necessary to intelligent business administration?

Economic Principles and Forecasting. One important task which must be assumed by every responsible head of a business enterprise is that of forecasting future developments. No manager who tries to guide his decisions by reason and intelligence, rather than luck, can escape this task. Every action he initiates is projected into the future, and he can reach an intelligent decision only by a prior appraisal of the future. If he decides to enlarge his plant, the extra space will be available in future months: can the products of the new plant be sold? If he decides to change the price of his product, he must first appraise the probable effect of that price change on customers and competitors. If he is attempting to organize his selling policies in a period of general price rise, he must anticipate the probable effect of rising prices on consumer buying habits. The business man cannot escape the future. He may operate without forecasting, as indeed some do, but he is then trusting completely to luck and he can in no sense be called a "manager" or "administrator."

That part of the forecasting job which is concerned with the behavior of customers and competitors rests directly on an understanding of the principles of economic relations discussed in this chapter. It is clear, therefore, that intelligent business administration cannot be carried on without constant reference to the laws of economic behavior.

Economic principles cannot be regarded as laws in the scientific sense. They are statements of broad tendencies. Regarded as trends of economic behavior they are true and reliable. They are in no sense theoretical. They supply a general description of the behavior, the actions and reactions of economic units, business enterprises, and individuals. They supply a guide to business thinking. In this sense they are one of the tools of business management.

DEFINITIONS

Demand curve. Graphic presentation of variations in quantity of a product purchased at different prices.

Elastic demand. Descriptive of a demand for a product, which increases so rapidly with declining prices that a 1 per cent reduction in its price is followed by a more than 1 per cent increase in the quantity published.

Inelastic demand. Descriptive of a demand for a product, which responds only slightly to price changes, so that a 1 per cent reduction in its price is followed by a less than 1 per cent increase in the quantity purchased.

Law of diminishing utility. General economic principle which suggests that additional increments of a commodity yield successively less enjoyments than preceding increments.

Supply curve. Graphic presentation of variations in quantity of a product offered for sale at different prices.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What two sets of relationships are, from the business manager's point of view, significant?
2. What do we mean when we talk about "economic relationships"?
3. Do sales vary inversely or directly with prices? Why?
4. Why has barter as a method of exchange been outmoded?
5. Name the three significant factors of the exchange process.
6. What effect will a rise in price have on demand and supply? What result will follow a fall in price?
7. What two elements combine to make up the demand for a product?
8. Explain the law of diminishing utility.
9. How do we describe the demand for a product when a variance in price produces a smaller variance in the volume of sales?
10. Name at least four commodities which have an inelastic demand curve.
11. At what point on the price scale will the business man stop supplying more goods and begin to decrease the supply?
12. Define and distinguish variable costs and overhead costs.
13. Name the two chief kinds of variable costs.
14. Economists state that the price of a commodity tends to equate supply and demand. Explain this statement.

B

1. Is the *desire to purchase* an important factor in determining the demand for a so-called necessity of life? Is it important in determining the demand for a luxury?
2. A man who makes $20,000 a year obviously has the *ability to purchase* more than two automobiles. Does this always mean that he will actually purchase more than two? Explain.
3. A and B both earn the same amount a year. Neither has a watch. Neither has any dependents. Elgin watches, formerly selling out of the price range of both A and B, are selling for $40, a figure which both can well afford to pay. Does it necessarily follow that both A and B will buy watches? Explain.
4. Will a man who makes $10,000 a year normally buy more or less food in proportion to his salary than a man who makes $1800 a year? Why?

5. It is obvious that the manufacturer of candy competes with other manufacturers of candy. Does he in any sense compete with the growers of citrus fruits or the producers of Jello and other desserts? In what sense?
6. Do products with inelastic demand curves lend themselves more to monopoly conditions than products with elastic demand curves? Defend your answer.
7. A. manufactures women's dresses. He discovers after manufacture of the dresses for 1941 that the market price is below the total cost per dress. Will the maxim that the lower the price is, the smaller the supply will be, apply in this case — so far as the 1941 season is concerned? Why?
8. Will the maxim mentioned in question 7 hold true over a 10-year period? Why? What terminology do economists use to distinguish the two situations?
9. Assume that a manufacturer suddenly discovers that an increased demand for his product necessitates an expansion of his production by one-third. Not only is the labor supply in his community small, but there is a powerful trade union which has absolute control of the labor market. Will this manufacturer's increase in production be accompanied by a more or less than proportional increase in variable costs?
10. If a manufacturer confronted with an unprofitable selling season decides to shut down production for two months, does it follow that his costs will end with the closing of his plant? What costs, if any, will continue?
11. In what situations will it be sensible for the manufacturer in question 10 to continue to produce — even if he must sell his goods at a figure below total costs?
12. A, a radio manufacturer interested chiefly in cabinet models, built his plant in 1924: B, also a radio manufacturer but interested in table models, built his plant in 1929. In 1930 the country was gripped by a depression. Which radio manufacturer stood the better chance of survival? Why? What economic adage does this illustrate?
13. When quantity supplied exceeds quantity demanded, what is the reaction among sellers? How does this affect price?
14. When quantity supplied is somewhat less than quantity demanded, what is the reaction among buyers? How does this affect price?

C

1. Draw a demand curve showing your interpretation of the demand conditions for wheat; for shoes; for radios; for electric refrigerators. Which curves illustrate inelastic demand? Which illustrate elastic demand?
2. Plot a long-term supply curve for the production of automobiles.
3. Try to recall all the major products manufactured in your home town or some other town with which you are well acquainted. Then classify them according to inelastic or elastic demand conditions. Which manufacturers will suffer most during a depression? Why?
4. Take one of the manufacturers whom you have designated in question 3 and list all his variable costs and overhead costs that you can think of. Does it seem likely that he is selling above or below total costs at the moment? Has he shut down operations at any time in the past 12 years?

5. Write a short history sketching the major developments in economic theory during the past 250 years.

SUGGESTED READING

McConnell, Friedrich, Ayres, Atkins, and others, *Economic Behavior*, Houghton Mifflin Company, Boston, 1939, Chaps. 16–19.

Scherman, Harry, *The Promises Men Live By*, Random House, Inc., New York, 1938.

Taussig, F. W., *Principles of Economics*, The Macmillan Company, New York, 1939, Chaps. 8–10, 16.

PART THREE

PRODUCTION

Production in the American Economy

Part One of this book described the place of business and the business man in our society. In Part Two, the tools of business management were described. In Part Three, we turn our attention to the productive process itself, the great American workshop which annually turns out a supply of commodities of all varieties greater than that produced by any other national workshop in the world.

In this productive process, there are three essential parts: raw materials, machines, and labor. All three must be available at the right time, in the right place, in the right quantity. Difficult as are the problems of securing an adequate supply of these essential factors, however, the task of combining the factors is one of even greater complexity. This is a management job, to the accomplishment of which must be devoted a full knowledge of the use of management tools, a rich experience in coordination and interpretation, and a sympathetic understanding of the human aspects of production.

We begin with a general discussion of the productive process. This is followed by a chapter dealing with the problems of supplying raw materials and machines. The section concludes with two chapters on labor, the first concerned with the supply of labor, the second with problems of labor relations.

CHAPTER 13

THE NATURE OF THE PRODUCTIVE PROCESS

THE TECHNICAL ORGANIZATION OF PRODUCTION

The production of goods rests upon the supply of raw materials (including land), machines, labor, capital, and managerial skill. Capital and managerial skill make possible the provision and combination of the physical factors. Some attention has already been devoted to the part management plays in business, and consideration will be given to the supply and uses of capital in Part Five. The discussion of the productive process in this section will be limited, therefore, to the basic physical factors of raw materials, machines, and labor, and to the problems which arise when these factors are combined.

The United States has been fortunate in its supply of all these basic factors. We have endless acres of fertile land suitable for almost every type of agricultural production. The mineral wealth contained within the continental borders is probably the richest concentration of natural resources to be found anywhere in the world. The inventive and adaptive genius of the American people has designed and built a bewildering array of machines and tools. We have a reservoir of labor power skilled in the use of machines. The productive process has developed better and faster here than anywhere else. The techniques of machine-labor combination have been studied more thoroughly, the benefits extended more widely throughout every economic level and in all strata of the population.

This great productive wealth could never have been realized without an ample supply of raw materials, machines, and labor. But these riches alone do not create an advanced stage of industrial development. The secret which energizes them is the method of their combination, the process we call the "technical organization of production" Production, that is, is made possible by the available supply of natural resources. But these resources must be transformed before they can be used. They pass through a manufacturing process determined by the application of machines and

human labor. It is this combination which is the heart of the technical organization of production.

The basis for this technical organization was found in the Industrial Revolution. The onset of this great change in the economic development of human society has already been described. It may increase our understanding of the organization of production today, however, if we review the contributions to mass production made possible by the Industrial Revolution.

Significance of the Industrial Revolution. The Industrial Revolution was one of the series of great wavelike movements in history which appear periodically to speed up the slow growth of human society. Within the brief space of two or three generations (1760–1830) a sequence of epoch-making inventions and adaptations brought to fruition what seemed, when studied against the background of the preceding centuries, to herald a true revolution of the machine. The pace of business, which had been moving through leisurely generations, acquired a breathless momentum which has not been lost to the present day. Eighteen-thirty does not mark the close of an era. It may rather be said to date the end of the period when the basic inventions were completed and the principles of future expansion were clearly laid down.

The achievements of the Industrial Revolution to which the modern business man looks for the roots of contemporary industrial organization were two in number. The first was the change in the technique of production which followed the discovery of the uses of power and the invention of machines run by power. This discovery and its attendant inventions made possible a rapid multiplication of the volume of commodities produced. Transportation shared in the results of the revolution, speeding the movement of goods, reducing shipping costs, enlarging the area within which the process of exchange could be economically maintained.

The second great achievement of the Industrial Revolution was accomplished within the area of social and economic organization. In those industries in which power-driven machines were replacing manual labor and hand tools (among the industries first affected were textiles, iron and steel, and metal products; later, transportation, agriculture, and the manufacture of a variety of consumers' goods), the old type of production organization was no longer useful. The small unit of household manufacture gave way to the large unit of factory production. Permanently invested capital, in

the shape of buildings and machines, became a necessity. The area within which products were sold widened; markets became national and even international in scope; and while markets were expanding, specialization was replacing universality in production. First the factory specialized, then the labor force, then the machine. Specialization subdivided the manufacturing process into smaller and smaller operations. The end in view was the simplification of production through its reduction to a series of simple repetitive operations which could be done by a specially designed machine. This was the foundation of the modern technical organization of production.

Machine Technology. Mass production in giant factories housing specialized machines rests on the twin factors of division of labor and extensive markets. Here is the environment of the machine and the technological problems which accompany it. Capital accumulation on a scale hitherto beyond the dreams of economic man; production concentrated in gigantic factories; intricately connected industrial relationships within one company, between companies, and between industries; invention, innovation, and adaptation multiplying risk through the rapidity of technical change; dependency upon vast sources of raw materials; equal dependency upon a supply of labor trained in setting up, supervising, and controlling machines. These are the landmarks of machine technology in the modern industrial system.

Economies of Large-scale Operation. Contributing to the size of capital accumulation required by the modern machine technology has been the drive of potential economies. Large concerns may save by quantity purchase of raw materials, tools, and supplies. Large concerns are often able to carry specialization of machines and labor beyond smaller firms in the same industry, securing thereby a material drop in manufacturing costs. Large concerns may find, in their increased sales volume, a way to reduce marketing costs. Large concerns are often able to utilize by-products, profiting from what would be waste in smaller companies. The meat-packing industry offers a good example of the savings derived from by-product utilization. From what once were waste materials are now produced tallow, soap, fertilizer, and glue. From horns, bones, sinews, and similar parts are produced gelatin, bristles, felt, soap powders, glycerin, poultry food, knife handles, and many other products.

This large-scale development of industry, with full realization of many special economies not available to smaller industrial units, has been made possible by adaptations in power production. The power of the Industrial Revolution was either water power or coal-produced steam power. We stand on the threshold of the age of electric power. Adaptations in the technique of power generation have made large-scale production workable.

It should not be assumed, however, that industry will continue to develop larger productive units. Throughout the nineteenth century it was commonly believed that economies in production costs were attached to every increase in the size of the manufacturing unit. Factory managers now know that this is not always true. Giant industry presents managerial problems which tax the power of human administrative skill. Large-scale production entails risks which the smaller firm sometimes escapes. It is now suggested that low-cost distribution of electric power over long distances may direct future industrial growth toward smaller decentralized factories. It may well be that the industrial organization of the years ahead will reverse the crowding-in of factories in smoky cities. We cannot predict the eventual organization of industry, but it is becoming clear that there are limits to the economies to be secured from growth in the scale of operations.

Risks of Large-scale Production. An important consideration in this connection is that of the business risk which accompanies large-scale production. The modern factory houses specialized machinery which represents a large investment of capital. The larger the factory, the greater the division of labor, the more specialized the machines, the larger the capital investment. Economies in production costs are secured in such a factory when it operates at capacity. But seasons of slack business force machines to stand idle, while overhead costs (represented by depreciation charges on the expensive machinery) continue to accumulate. Changes in technical processes and the invention of new and more economical machines may render a hitherto efficient plant almost worthless.

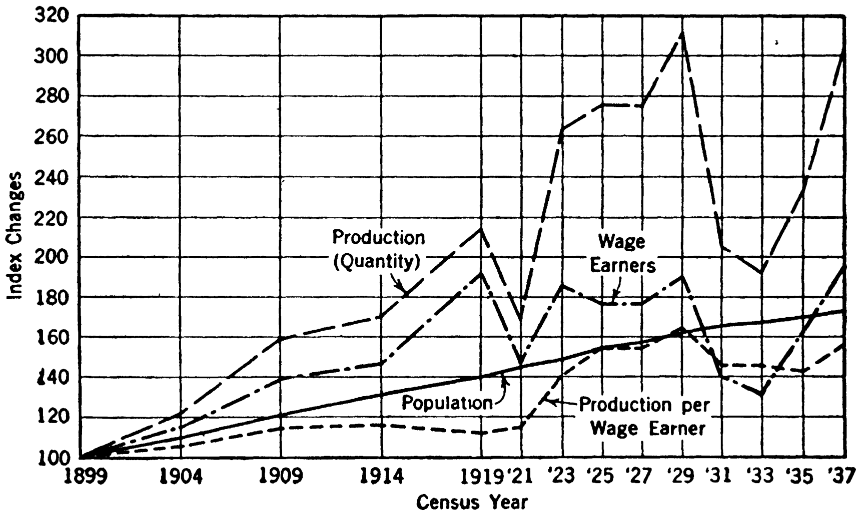
Economic Interdependence. Only one effect will be mentioned here of the dependency of the giant industrial plant on vast resources of raw materials. That effect is the economic interdependence of all parts of the country and even of all parts of the world.

In the manufacture of an automobile, raw materials and parts are supplied by practically every state and by a number of foreign countries. Mine, forest, farm, and factory all contribute to the finished product. A world in which the machine is dominant is a world knit together by economic tentacles sometimes even stronger than political alliances.

In the case of labor, the machine system has forced an increasing specialization of skills. One hundred years ago a skilled mechanic was a true jack-of-all-trades, experienced in handling many tools,

CHART 22

CHANGES IN POPULATION, WAGE EARNERS, AND PRODUCTION
1899-1937



with a working knowledge of a variety of mechanical techniques. Today labor is divided into classes one of which consists of machine tenders or assembly-line workers, readily trained to routine operations which involve the endless repetition of simple motions. Another class of workers required by the machine technology is that of the highly skilled tool maker. A worker in this class is a trained specialist. The nature of this work necessitates a long training period, but the intricacy of the technical processes which the worker must master prevents him from developing a breadth of mechanical skill similar to that of the traditional mechanic.

There are a few jobs which still require broad mechanical knowledge. The work of the garage mechanic falls into this

classification. But in the mass production industries, specialization of machines has forced specialization of labor, and the workman has become more dependent on the machine, less on his own skill and knowledge.

Limiting Factors in Production. There are a number of clearly defined limits to the volume and the rate of production which can be achieved in any country. The first is the limitation of natural resources. The supply of some raw materials, such as coal or petroleum, is being drawn down every working day. That portion of the total supply which we consume is gone forever and cannot be replaced. The supply of other raw materials, such as lumber, can be replenished only after a long period of planning and waiting. The exhaustibility of these resources dictates prudence in their use, for we are every day spending the inheritance of generations yet to come. Production is limited by raw-material supply and must be so organized as to utilize available resources with the utmost economy.

A second limiting factor is the level of scientific development. Raw materials must be transformed by a manufacturing process. We stand today as the inheritors of the scientific progress achieved through centuries of study and experiment. Every machine and tool, every chemical process, the evolution of factory layout, the construction of engines constitutes a technological problem which limits the productive process. Opportunities are created as scientific knowledge is increased, for into the task of production is thrown the full range of human knowledge. The business man functions as an economic unit. But he has at his command the sciences and the arts, and he must understand their application and use.

A third limiting factor is found in the geographical distribution of resources and markets. The location of many types of industrial activity is determined by the concentration of materials and markets. In other industries, transportation charges and the supply of power and labor influence both the location and the nature of manufacturing activity. All these factors create a problem of adjusting industry to its environment, which acts as a limiting factor to the free and unimpeded expansion of production.

Still a fourth limiting factor is time. That method of production which we call "capitalistic," characterized by the use of specialized

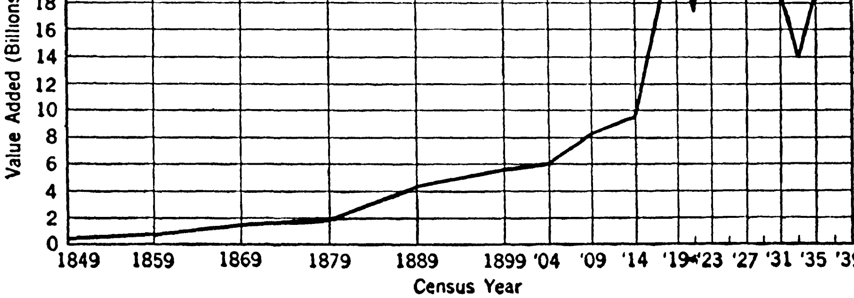
machines and the division of labor, is a time-consuming process. Because the production process may take many months, from the purchase of machines and raw materials to the completion of the finished product, it is necessary for business men to look far into the future in planning production. Failure to appraise correctly the opportunity to sell at a profit six months ahead that which is entering production today will cause serious loss. Faulty appraisal of consumer demand entails mistakes in capital investment in the tools of production, waste of resources, labor, and managerial skills, and, most important, a diversion of these materials and talents from those industrial uses to which they might otherwise have been devoted.

PRODUCTION POTENTIALS

Production in the United States is carried on by more than 41 million individuals. It utilizes over 365 billion dollars worth of

CHART 23

CHANGES IN VALUE ADDED BY MANUFACTURE, 1849-1937



land, buildings, equipment, and inventory. In 1939, the physical goods produced were valued at more than 60 billion dollars. This contrasts with an annual production of less than 5 billion dollars in the 1860's and a peak production valued at 66 billion dollars in 1929. Decade after decade has recorded an increase in the value

of production in the United States, so that the history of production is one of continued growth. Periodically the long-time trend has been interrupted by depressions, but after every depression the trend has been resumed in an upward direction at an average annual rate of increase of approximately 3.5 per cent.

The raw materials, physical productive equipment, and labor power of the United States justify the belief that the industrial machine is capable of turning out the volume of goods necessary to support a high standard of living for all Americans. Yet we are aware that this magnificent productive equipment has rarely been fully utilized. Even in periods of intense business activity, the volume of goods produced in this country appears to be less than might be turned out with full employment of plant and labor. This section will be concerned with attempts to measure America's capacity to produce. What is the production potential of the United States? How does actual production compare with potential production? Why has actual production fallen short of potential production?[1]

Actual versus Potential Production. Our knowledge of supply-price relationships indicates that in the long run as much will be produced as can be sold at a profit. Ability to realize full production depends, therefore, on the ability of consumers to buy the goods produced at prices that will return a profit to business.

Two things must be established in our economy. The first is the building, maintenance, and increase of plant, machinery, and raw materials sufficient to provide for a high, and rising, standard of living for a growing population. The second is the distribution of purchasing power throughout the nation's population, in all income groups, sufficiently great to prevent productive equipment from standing idle for want of markets in which to sell goods.

The problem may be defined even more closely. Full production with the greatest benefit to the nation as a whole is not merely a matter of turning out goods at a high rate of speed. There are various types of goods, and they must be produced in the correct proportions.

[1] The general line of reasoning followed in these pages is drawn from Edwin G. Nourse and Associates, *America's Capacity to Produce*, The Brookings Institution, Washington, 1934.

One possible classification of goods divides them into four groups: the first includes all those perishable consumers' goods which are used up soon after they are produced. Food and clothing fall into this class. The second group consists of durable consumers' goods which last a considerable period of time. Automobiles, houses, and furniture fall into this class. The third group consists of non-durable producers' goods, such as raw materials, fuels, and factory supplies, which are used up or change form in the manufacturing process. The fourth group includes durable producers' goods, such as factory buildings, machinery, ships, and railroad facilities, which are used in production over a long period of time.

Since all producers' goods are used ultimately to make consumers' goods (although a portion each year must be diverted to the maintenance of existing producers' goods and additions to the supply thereof), one problem in attaining full production is that of securing a balance between the output of producers' goods and that of consumers' goods. Enough consumers' goods must be produced to satisfy the demand for food, clothing, shelter, furniture, and similar products. And enough factories, machines, generators, and raw materials must be produced to maintain and add to the stock of producers' and consumers' goods.

The Limits of Potential Production. It has been alleged frequently that the American economy has produced for years at a rate substantially below capacity. Superfluous producing equipment has been piled up, standing idle even in years of great business activity. Is this charge true? What is the true potential productive capacity of American industry?

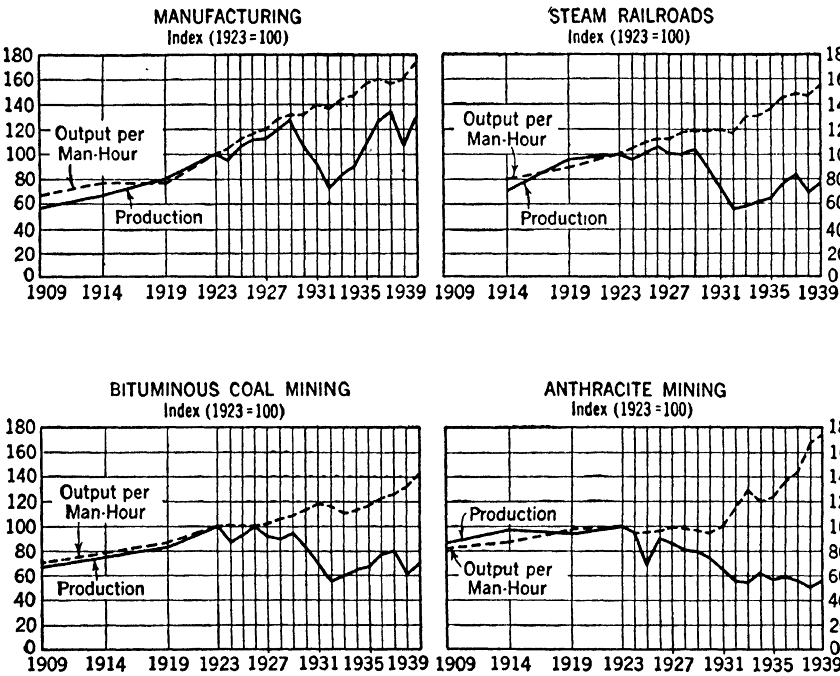
It should be observed, in the first place, that it is very difficult to secure any accurate measure of productive capacity. Manufacturing plants may be measured only in terms of the most effective full utilization of existing production facilities under existing methods. Such increases as may come from scientific discovery and mechanical invention must be disregarded. Second, production potential must be appraised realistically, in terms of existing standards of plant maintenance and accepted hours of labor. Still another difficulty is encountered in gauging the usefulness of old machinery which has become obsolescent and high-cost. Further allowances must be made for shutdown periods for necessary repairs, failure of power supply, or other unavoidable interruptions.

These considerations make it apparent that an estimate of potential production for any industry is a hazardous statistical venture. When properly supported by experts from within each industry, however, a careful study may give a reliable over-all picture of capacity and use in American industry.

Such a study was undertaken by members of the staff of The Brookings Institution, and the results were published in 1934 in a

CHART 24

PRODUCTION AND PRODUCTIVITY IN THE UNITED STATES
SELECTED INDUSTRIES FOR SELECTED YEARS
1909 - 1939



volume entitled *America's Capacity to Produce.* This study attempted to make an objective appraisal of productive capacity in the United States during the period 1900 to 1930. The record of the closing years of the period under examination is unusually interesting, because it shows actual and potential production under conditions of the highest industrial productivity and the most widespread consumer prosperity which have ever been experienced in this country.

The authors of this study concluded that there had appeared consistently a surplus of productive plant in the United States. Their measurements indicated that during the peak period 1925–1929, the proportion of actual utilization of productive capacity in the mineral industries was 83 per cent, and in manufacturing 80 per cent. Railroad rolling stock appeared to have been utilized at a 70 per cent rate.

On the whole, it was concluded that the entire productive system was operating at about 80 per cent of capacity in 1929, and at a slightly lower rate during the period 1925–1929. If the non-utilized 20 per cent of capacity had been brought into production, goods and services would have been added in an amount equal to one-fourth of the goods and services actually produced.

If this figure is somewhat disappointing to those who have dreamed of tremendous untouched reserves of productive power in the United States, it should be remembered that the measurements were projected against a background of high-level prosperity. In 1932, American industry was producing only 60 per cent of the goods turned out in 1929. Increasing to capacity in 1932 would have meant almost a doubling of output. It should also be remembered that these are measurements of capacity under existing production methods. The potentials of invention and scientific discovery are beyond estimate. Every passing year sees an increase in machine and human productivity.

Measuring the Potential Increase. The 20 per cent potential increase in production existing even in 1929 would have represented a 15 billion dollar increase in the country's income.

> It would have enabled us to add goods and services to an amount of $765 on the 1929 price level to the consumer gratifications of every family having an income of $2,500 or less in that year. We could have produced $608 worth of additional well-being for every family up to the $15,000 level. Or we could have brought the 16.4 million families whose incomes were less than $2,000 all up to that level. . . . We might change the form of our computation and say that it would permit of increasing all family incomes below the $3,500 level by 42 per cent. . . . Finally, not to put our statement in a form which smacks in any way at all of redistribution of wealth, we could say it would add $545 to the income of every family of two or more persons, or give $125 to every man, woman, and child in the country.[1]

No business man and no student of the American economy can consider this gap between actual and potential production without

[1] Ibid., pp. 429–430.

concluding that the high standard of living already attained in this country is only a suggestion of what might be secured. The dynamics of invention already clearly establish that the problem of how to utilize the existing productive equipment is of greater significance than the problem of speeding the rate of scientific discovery. Somewhere between the organization of production and the organization of consumption — between making and buying — lies the secret of living standards as far beyond those we now enjoy as these are beyond the standards of a century ago.

THE GEOGRAPHICAL STRUCTURE OF PRODUCTION

It is a characteristic of many industries to cluster in well-defined regions. There are, it is true, few areas devoted exclusively to the production of one commodity, but the distribution of manufacturing in the United States shows clearly that there are strong regional preferences on the part of a number of industries.

> Nearly one-half of our automobiles come from southern Michigan. Over one-third of our agricultural implements and a similar proportion of our meat products originate in Chicago. Fifty per cent of our ammunition, firearms, and fine tools comes from Connecticut. Three-fourths of our clothing and one-half of our printers' ink are manufactured in New York. One-half of the nation's steel is rolled in Pennsylvania and eastern Ohio. Two-thirds of the nation's cheese and one-fourth of the paper supply comes from Wisconsin. One-third of our carpets are woven in Pennsylvania. A similar proportion of our machine tools and two-thirds of our rubber products are fabricated in Ohio. Over one-half of our lumber comes from the lower Mississippi Valley and the Pacific Coast states, where an abundance of this resource still remains. Massachusetts is the source of over one-third of the nation's footwear, and in addition one-third of our woolens and one-fourth of our cotton goods are the product of her mills. The Carolinas produce a like proportion of our cotton fabrics; and though Rhode Island is the smallest state in the Union, she ranks fifth in the textile industry, there being more spindles within a 30-mile radius of Providence than in any other similar area in the New World.[1]

In connection with this comment, it should be observed that there are a number of industries which usually remain decentralized. The manufacture of bricks, baking goods, ice, and other products is carried on in almost every state. Special characteristics of the goods, perishability, or unusually high transportation costs explain this tendency, which runs counter to the usual gravitation toward special areas.

[1] William N. Mitchell, *Organization and Management of Production*, McGraw-Hill Book Company, Inc., New York, 1939, p. 48.

Location Factors for Industry. The major factors influencing the location of industry can be grouped under three heads: (1) the location of resources; (2) the location of consumers; and (3) the history of economic development in the past. These factors do not all influence industrial location in the same way or at the same time. Often, industrial location represents a compromise between opposing forces. Many times, the location of a plant can be ascribed simply to chance or the accident of the birthplace of the founder of the enterprise.

Location near Resources. Location of industry near sources of raw materials must be considered in relation to transportation costs. Every manufacturer must decide whether he prefers to locate near raw materials, and assume the costs of shipping finished products to their major markets; or to locate near markets, and bear the expense of transporting raw materials from their sources to his plant.

Location near raw material sources is likely to be found when materials are bulky and of low value, when they are perishable prior to processing, or when the manufacturing process discards waste and otherwise reduces the bulk for transportation. The manufacture of cement and wood pulp, the salmon-canning industry of the Pacific Northwest, the beet-sugar industry of Utah and Idaho, and the fruit-canning industry of California all illustrate these principles.

Location near Markets. Location of industrial plants near major markets is likely to occur when products are fragile or likely to spoil (baking and confectionery industries); when the manufacturing process increases bulk and shipping costs (shoes and some types of furniture); or when the advantages of a highly organized marketing center are available to producers (Boston as a wool and shoe market, New York as a market for ready-made clothing).

When forces favoring location near resources and forces favoring location near markets balance, one often finds industries locating at some point midway between supply sources and markets. The choice of a midway point is often directed by such factors as relative transportation charges for raw materials and finished goods, availability of low-cost power, the local supply of labor skilled in the required operations, or the strategic juncture of rail facilities or of rail and water transportation. It should also be observed that industrial specialization is often followed by the near-by location

of subsidiary industries. Thus, the manufacture of heels and shoe findings is attracted to the shoe industry; and subsidiary parts producers locate near the automobile production center at Detroit.

Location and Labor Factors. Another factor influencing plant location is the variation in labor costs. This is particularly significant for those industries in which labor costs make up a large proportion of total costs. The shift of the cotton textile industry from New England to the South offers a good example of industrial location adapting to the pattern of low labor costs. The combination in New England of established labor organizations, extensive legislation governing conditions of employment, and high cost of living has provided a background favoring the shift in the industry to the South.

Many people wonder how it is possible for labor-cost differentials to continue to exist. They ask why workers do not move away from communities and industries which offer low wages, thus causing a kind of competition for labor which will bid up wages and bring the various regions and industries into greater uniformity.

Part of the wage differential represents merely differences in living costs between cities and small towns. To some extent, however, differentials are maintained by the relative immobility of large groups of workers who are unwilling to move from familiar to unfamiliar surroundings. Often, lack of knowledge of jobs and wages at distant points inhibits the migration of workers away from low wage areas and industries.

Mention should also be made of so-called "parasite" industries. It is frequently pointed out that in an area of heavy industry giving employment to male labor, there is present a surplus of women workers attached to the community and willing to work for relatively low wages. This situation may attract light industries featuring hand assembly work to which untrained women may be quickly adapted.

Location and Power. The supply of power may be regarded as a factor parallel to the supply of labor, but exerting somewhat less influence on the location of industry. In the early nineteenth century, of course, water power was a very important influence on industrial location. But the development of electrical power, long-distance transmission of power, and cheap transportation for coal as a source of local power production have all contributed to minimize power availability as a dominant influence.

Major Industrial Areas. For several generations industrial concentration has been proceeding without check. In 1870, 23 per cent of the population of the United States was living within 33 of the country's largest industrial areas. In 1940, the proportion was over 35 per cent. Although at scattered points in the industrial panorama there can be observed a trend toward decentralization of industry, the underlying movement has not yet reversed itself.

The earliest industrial areas in the United States were located in New England and the Atlantic states. As the center of first settlement, aided by the availability of cheap water power, and guided by the poor quality of the land for farming, these sections early in their history laid the foundations of an industrial order which only recently has begun to decay. They have retained a large part of the nation's industrial facilities because they offer concentrated markets and skilled labor. Their hold has been strengthened, in addition, by the difficulty and high cost of transferring an established industrial plant representing the culmination of localized investment through several generations.

The spread of population westward across the Alleghanies carried manufacturing enterprise along with it, founding new industrial centers at strategic points along transportation routes adjacent to raw material sources. The location of coal and iron resources laid the foundation for a great steel industry in the Pittsburgh and Great Lakes area. The virgin Michigan forests early attracted the furniture industry, which has been held in the first location, even after depletion of timber lands, by investment in productive plant and the presence of skilled workers and subsidiary industries. The Detroit area attracted the nineteenth-century carriage industry, largely because of its proximity to near-by forest resources. When many of the carriage makers turned to the production of automobiles, Detroit became the location focus for a giant new industry. It has been asserted, on the other hand, that the location of the rubber industry in Akron, Ohio, and the glove industry in Gloversville, New York, can be traced only to the accidental location of inventors, organizers, and promoters.

Migration of Industries. The industrial history of the United States is marked by a series of migrations by many industries. For the most part, such migrations have occurred not through the transfer of existing plants or their equipment, but rather through

the location of new plants. In this way, the older centers slowly decay, while new industrial areas gain in affluence. Among the products which have undergone pronounced shifts in location clusters have been lumber, cotton textiles, shoes, furniture, clothing, and hosiery.

The lumber industry has followed the untouched forests, leaving cutover areas and abandoned towns behind at each remove. The cotton textile industry originally located in New England because of its labor supply and water power. Recently it has been moving south in search of cheaper labor and cheaper power. Fifty per cent of the cotton textile workers were located in New England in 1910. By 1940, the proportion had fallen to 20 per cent. In the same period, the proportion of cotton textile workers in the South rose from 35 per cent to over 65 per cent. Subsidiary industries, such as dyeing and finishing, have followed the textile mills, and hosiery has not been far behind. In almost every case, that section of the industry requiring the least skilled workmanship moved first and that requiring the highest skill moved last.

Large sections of the shoe industry have migrated from Massachusetts to New York and then to Missouri, seeking the combined advantages of central location with respect to consumer markets and nearness to raw materials. The significance of the shift may be measured against the concentration of shoe workers in Massachusetts: almost 100 per cent in the first half of the nineteenth century, 40 per cent in 1910, 20 per cent in 1940.

The clothing industry, originally concentrated largely within the confines of New York City, has recently displayed a tendency to move westward. In part, this represents a delayed adaptation to moving consumer markets; in part, it is the result of a search for lower rent and labor costs; in part, it represents the challenge of new style centers, such as Hollywood.

Social Significance of Industrial Migration. The changing pattern of industrial location traces the evolution of manufacturing activity through the various regions of the country. It marks the obvious measure of community growth and decay, in terms of jobs and pay rolls, retail trade, financial activity, and transportation facilities. This may be regarded simply as part of the normal economic life of communities. Some industries succeed and prosper; others fail and die out. New manufacturing methods, new raw material sources, new avenues of trans-

portation bring some regions into prominence as advantageous industrial sites, and cause the gradual abandonment of other regions. Every survey of commercial activity, every report of the Bureau of the Census, measures these changes.

Basic issues of social significance underlie the surface tide of industrial migration. What happens to the social health of a small one-industry town when the local factory is closed and production is transferred to another city? What happens in the boom town whose energetic Chamber of Commerce attracts by publicity devices industries which remain only a few years? To what extent does industrial migration fit into a long-range program of national economic planning? What about the abandoned textile and shoe cities of New England? Or the new southern boom towns?

Some relocation of industry is both desirable and necessary. Whenever economic factors make available new low-cost manufacturing sites, production must move in that direction. But it is of the greatest significance to the health of the nation that no major relocation of industry be attempted without some appraisal of the social consequences of the transfer. For society as a whole it is possible that the economies in production costs available in a new industrial location may be counterbalanced by the social costs incurred in the abandoned community. Labor is not as mobile as capital. The families of discharged workers become wards of the community. Poor relief increases. At the same time, the community's income from taxation is reduced. The community is caught between decreasing income and increasing expenses.

At the present time there is no way to force the migrating industry to assume even part of the social burden it leaves behind. Some individual industrial managers recognize the burden and endeavor to appraise it when considering the relative advantages and disadvantages of migration. Some companies make special provision for workers discharged in this way through no fault of their own. They offer a severance payment to help tide the discharged worker over the period of his search for a new job. Or they undertake to assume all costs incurred in transferring the worker and his family to the new location.

There is reason to believe that there is increasing recognition of these social costs of industrial migration, and increasing willingness on the part of business managers to assume part of the costs

or to consider such costs as factors in appraising the desirability of shifting industrial locations.

Decentralization. In connection with the problem of the social implications of industrial migration it is desirable to pay some attention to certain tendencies toward decentralization. Some authorities have pointed out a tendency for manufacturing establishments to seek new locations in small communities lying on the outskirts of large industrial areas. This represents a reversal of the past trend toward concentration. Among the influences leading in this direction are potential economies in costs of factory sites and buildings, opportunity for better housing facilities for employees close to their place of work, and savings in material handling costs secured through the avoidance of city traffic and freight handling.

An extension of this development, which has been more talked about than acted on, is a possible trend toward industrial decentralization of small plants in small towns. This possibility has been widely discussed in terms of "village industries." It has been given consideration as a device for balancing the admittedly serious social problems created by seasonal industrial employment and seasonal agricultural employment. Employees of small industrial plants offering only seasonal employment may find a balancing activity in farm work, or may at least fill out their real income by raising part of their family's food on small farms near the factory. Some experiments in this direction have been made by Henry Ford, by the Aluminum Company of America at it. plant at Alcoa, Tennessee, and by the Tennessee Valley Authoritys

It should be observed, however, that it is not easy to secure an exact seasonal balance of employment between agriculture and industry. Much thoughtful experiment will be necessary to supplement current theorizing about the possibilities of this type of industrial development.

DEFINITIONS

Consumers' goods. Products purchased and used by ultimate consumers, which are not devoted to the manufacture of other goods.

Division of labor. Concentration of workers on specialized tasks, brought about by the subdivision of manufacturing tasks into their component parts. Thus, instead of one shoemaker producing the entire shoe, the operations are divided into a series of specialized tasks to each of which workers are assigned. Division of labor is a necessary basis for the use of machines.

Overhead or fixed costs. Those operating costs which tend to remain relatively unchanged despite variations in the scale of production. Thus, rent, taxes, and salaries of executives are maintained at the same level regardless of the scale of operation of the plant.

Producers' goods. Goods used to make other goods. Examples are factory buildings, machines, and raw materials.

Variable costs. Those manufacturing costs which tend to vary with changes in the level of productive activity, such as raw-material costs and labor pay roll.

QUESTIONS, PROBLEMS, PROJECTS

A

1. Upon what four factors does the production of goods rest?
2. When did the Industrial Revolution begin? When did the period of basic inventions end?
3. Upon what twin factors does mass production rest?
4. Is it true that the larger the volume of production, the lower the unit costs?
5. Is the ratio of overhead costs to variable costs higher or lower in a large factory than in a small one? Which factory is more likely to sell "below total costs" when the price level has fallen?
6. What are four limits to the volume and rate of production which can be achieved in any country?
7. What elements are necessary in order to insure ample production of goods in the United States?
8. Define perishable consumers' goods and durable consumers' goods.
9. Why must a balance be maintained between the output of producers' goods and the output of consumers' goods?
10. What would the utilization of all of our productive capacity mean in practical results to most of us?
11. What three general factors influence the location of industry?
12. In what situations will a manufacturer locate near major markets and assume the expense of having the raw materials shipped to him?
13. Why do laborers sometimes remain in industrial areas despite the fact that wages have fallen far below the level paid elsewhere?
14. Were any of the industrial developments purely accidental?
15. Why does seasonal employment create a social problem? Is the problem more or less serious in a large city than in a small one?

B

1. With the increase of specialization in production, did the dependency of man upon man increase or decrease? Explain.
2. Did the need for freedom of trade vary inversely or directly with the growth of specialization in production?
3. We have talked elsewhere of the sound long-term policy of a business man who discharges his social responsibilities. Have the business man's responsibilities increased along with the size of the productive units? And has it become

more or less difficult, as mass production has grown, for the business man to discharge these responsibilities?

4. Would smaller decentralized factories tend to decrease or increase the warfare between labor and capital? Or would it have any effect?
5. The larger the factory, the larger the risk of loss. What factor offsets this increased risk of loss, and how does it fit into what we have already learned about the private-enterprise system?
6. Although there is a sharp division of labor in most of our industrial plants, are most laborers today skilled or unskilled? Are their services more or less marketable than they were heretofore?
7. Because natural resources are limited, we have instituted conservation programs for the "public welfare." But are not conservation programs, from the strictly selfish point of view of a business man, a sound investment? Is this not a case in which the selfish economic interests of a business man dovetail in the long run with his social responsibilities?
8. We say that factories should be located in geographic areas where the necessary raw materials and labor are easily obtained and there is ready access to a market. Does this make national self-sufficiency a wasteful or efficient policy from an economist's point of view? Does it have any bearing on the tariff question? Does it have any bearing on the question of interstate trade barriers?
9. The more specialized the countries of the world become in the production of goods, the more dependent they become upon each other. Does this argue for or against international free trade and the abolition of tariff barriers?
10. Is the current demand of laborers for shorter hours and higher wages conducive to a higher standard of living?
11. Does monopolistic control of price and supply result in a higher or lower standard of living in the long run?
12. Why does one-third of our meat products originate in Chicago? Fifty per cent of our ammunition in Connecticut? Three-fourths of our clothing in New York? One-half of our steel in Pennsylvania and eastern Ohio?
13. One reason why the cotton textile industry has shifted from New England to the South is that labor unions and labor legislation boosted the costs of production in New England. Does this fact mean that the labor unions were shortsighted in demanding higher wages in New England, or does it mean that they must organize in the South, thus equalizing labor costs in the two areas?
14. What does the slight trend toward decentralization of industry indicate about the economies of mass production?
15. Is it economically efficient or inefficient for industry to change its location?
16. Does the shift in industry have any unfortunate social repercussions? Why?
17. Why is it important to remember the relative immobility of labor when advocating removal of an industry from one area to another?
18. What economies can be gained from decentralization of industry?

C

1. Trace a map of the United States and label the various areas according to the products for which they are responsible. Are all of these products naturally well adapted to these areas?

2. Obtain an outline map of the world. Label the areas according to the major products produced there. Keeping in mind that industries should be located close to raw materials, ready markets, and an ample supply of labor, jot down the areas which are not well-suited — naturally — for the products manufactured there. Why should there be this misallocation of industry in some areas?
3. Using an outline map of the United States, indicate the industrial development of the country as it swept from New England westward and finally southward. Assign each area a date indicating the beginning of its industrial development and write in the natural resources which attracted industry to each of them. Also name the industry attracted to each.
4. Write a brief history of industrial development in England. Write a brief history of industrial development in the United States. Compare the two.

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CHAPTER 14

MATERIALS AND MACHINES

I buy a farm in the country. Among the many odd jobs which have to be done on the farm is the erection of a stone wall to keep out my neighbor's cows and pigs. A near-by cliff offers an excellent supply of stone. How can I get the stone out? I can attack it with my bare hands, work out the loose pieces, and carry them to where I want to build the wall. But this is slow and laborious, and it seems doubtful that I can ever get a sufficient supply of stone this way. I can probably do better with a hammer and chisel chipping out fragments of stone for the wall. This is a more efficient method than the first, but still far from satisfactory, considering the size of the wall and the amount of stone that is required to complete it. Still a third method might be used. I might drill a hole in the rock, procure powder, fill the hole with powder and blast the face of the stone into fragments suitable for the wall.

This story of the possible methods of procuring stone for a wall brings into clear focus the difference between hand and machine production. Machine production is not so direct as hand production. It takes longer to organize and put into operation. But the ultimate result, the product of applied machines, is much greater than could be secured by hand-production methods.

It is this combination of materials and machines with labor power in the modern factory which makes possible the great volume of mass production which is the characteristic feature of the contemporary industrial system.

All productive effort amounts to no more than changes in the form of raw materials and new combinations of materials not naturally associated with each other. In earlier phases of civilization, the changes in form and the combination were accomplished by the application of hand labor to materials. In the modern factory they are accomplished by power-driven machines. The fundamental instruments are really unchanged. The raw materials are the same. Substituting for hand labor, the power-driven machine provides extra motive energy.

With this new combination of materials and machines, both the scope and the volume of production are increased. There are clear limitations to the work which can be accomplished by human labor. A man using a pickax can perform only a certain volume of work each day in breaking stone. The volume is limited by the number of strokes which he can deliver and the power behind each stroke. Nor can his effort be supplemented by the efforts of others, since only one man can work in one place at one time. The steam-driven rock breaker or drill can break stones at a rate equal to the combined work of many men. It can work continually, without rest, and with absolute uniformity of direction and force of stroke. The machine does not idle. Its engines are not misdirected or misapplied.

But we must recognize that although the fundamental character of the instruments of machine production is similar to the fundamental character of the instruments of hand production, management and use problems are different. They differ in kind and they differ in degree. It is necessary to reach a clear understanding of the distinguishing features of mass production in order to comprehend how materials and machines are combined in the modern factory.

The distinguishing characteristics of the mass production technique can be summarized in the following terms:

1. The problem of standardizing operations.
2. The problem of simplifying products.
3. The problem of uniform raw materials.
4. The problem of continuous operation.
5. The problem of timing work-flow.

Significant aspects of these problems will be discussed in the following pages.

STANDARDIZATION

We accept standardized operations and standardized products as an unquestioned characteristic of modern factory production. A thousand army rifles may be taken to pieces, the integral parts mixed together, and from the mass can be assembled 1000 rifles in good working order. The same operation can be accomplished with a group of automobiles of any single make, the parts interchanged, the automobiles reassembled.

Not only do we take for granted such standardization of parts as will permit this breakdown, exchange, and reassembly, but we expect finished products to be absolutely uniform, conforming to preestablished standards. We expect every can of peas packed under a single brand name to adhere to the same standards of weight, size, color, proportion of solid and liquid matter, and flavor. We expect every size 15 shirt to be the same size. A similar standardization of product is accepted as commonplace for all types of manufactured goods, whether destined for consumers' or producers' use.

Bases for standardization include standardization of size, as in the case of clothing, containers, or trucks; standardization of design, as in the case of cloth patterns or the style of an automobile; and standardization of quality.

The history of standardization extends back to the early period of the Industrial Revolution. In every industry, standardization has been introduced soon after the beginning of the use of machines. It has been extended with the growth and maturity of the industry. The historical line of development for almost every product can be traced from complete nonstandardization, usually accompanied by hand production and rudimentary division of labor, to complete standardization, usually accompanied by a high proportion of machine production and a complex division of labor. This has been the experience of all varieties of products, from pins and clocks and guns to automobiles and radios and airplanes.

Reasons for Standardization. What reasons underlie this general trend toward standardization? Certainly it has not been an accidental development, for the setting and maintenance of standards in both operations and finished products is an enormously complicated task. It can be accomplished successfully only by the most meticulous control, planning, and supervision. These must be applied to raw materials, to manufacturing operations, to machines, and to human labor. They must be supported by a willingness to discard off-standard products as waste. Surely there must be real advantages to both producers and consumers to justify assuming the difficulties which are inevitably attached to the setting and maintenance of standards. Perhaps we shall also discover that there is something inherent in the nature of the power-driven machine and in the mass-production technique which enforces standardization.

We may start with the observation that the virtue of the machine is that once designed to perform a particular task, and once the necessary power has been supplied to make it operate and the necessary raw materials to feed it, it will go on doing its particular operation until it breaks down. It cannot vary its operation by a hairsbreadth unless it is reset. It does not think or plan or design for itself. Once established in its groove of work, it can do nothing else. Whereas the most difficult thing for the human worker using a hand tool is to do the same operation twice in exactly the same way, the most difficult thing for the machine is to do the same operation twice in different ways.

The technique of mass producing with power-driven machines is easily described. It consists, in general, of breaking down the production job into a series of routine operations. Then the assembly line is set up with machines and labor aligned throughout its length, each unit assigned to a specific, uniform, simple task. The raw materials are introduced at one end of the line. They pass along it, changing form as they proceed under a series of routinized operations until they emerge at the other end as a completed product. This is the way automobiles are produced. And this is the ideal productive process, part or all of which is applied to almost every manufactured good.

Notice that the entire synchronized process depends upon the decision to manufacture an absolutely standardized product. Let variations be introduced, and for every change, the productive process must be halted, machines reset or new machines introduced, human labor trained to another operation, the simple routine of repetitive tasks broken down. Time is wasted in adapting to change. Machines stand idle. Human labor is unemployed. Factory-overhead charges accumulate. The whole fund of equipment, talent, and energy which make up the sum of productive potential is unemployed, and all because the standardized routine has been halted to permit a change.

The removal of standardization of operations and products (the two are indissolubly bound together) would mean the end of mass production of goods at low unit costs. It would mean the termination of the greater part of modern manufacturing methods. The long line of productive operations, the assembly line, would be disrupted and changed to a sequence of semi-independent tasks. It would be impossible to utilize effectively many of the

complicated single-process machines which contribute so much to reducing production costs. Workers would have to be retrained, and much of the skill which comes from the repetition of single operations would be sacrificed.

Probably the greatest benefits of standardization are realized by producers. The discussion of the preceding paragraphs suggests how important are many of these benefits. But consumers also benefit. The most obvious consumer advantage is lower selling prices for the multitude of manufactured goods turned out under mass-production methods. This has brought even to the lower income classes a wealth and variety of manufactured products. It has contributed materially to an elevation of living standards in all income groups. It has transformed luxury products into conveniences or even necessities.

Standardization and Variation. The adoption of standardized operations for mass production does not, of course, result in an absolute uniformity of manufactured goods. All Chevrolet cars are not identical. They are manufactured in a variety of body types and a range of colors, and the purchaser is given an opportunity to select upholstery colors and fabrics. The introduction of this type of variety in the finished product does much to remove the curse of drab absolute uniformity. Yet it does not seriously interfere with the standardized mass-production process. The main assembly operation is unchanged, and the effect of variety is confined to a few finishing departments. Even in these divisions, because of the great number of units of each type, it is possible to standardize operations for thousands of consecutive bodies, before adapting to a new color or body type.

There is no doubt that every departure from absolute standardization increases unit manufacturing costs. Yet consumers insist on a certain degree of variation, and insist on more variations for some commodities than for others. Women's dresses are presented in a greater diversity of styles than are automobiles. Automobiles have more variations than cans of baked beans. An important aspect of the producer's problem is the appraisal of the desirable compromise point between the economies of uniformity and the sales opportunities of variety. Luxury products manufactured for the wealthy often have a high proportion of hand labor and can make concessions to individual differentiation and an almost infinite variety. They are sold to consumers who are

willing to pay high prices for unique goods or for merchandise specially adapted to their individual preferences. Other products destined for the mass market must sacrifice part of this appeal of variety in the interest of lowered selling prices made possible by standardized mass production.

SIMPLIFICATION

Closely allied to standardization, and yet presenting a distinct problem, is simplification. The process of simplification is the reduction of the number of different types of finished goods produced. Simplification was first studied during World War I by the Conservation Division of the War Industries Board which was charged with responsibility for the elimination of waste and the efficient utilization of materials and equipment. In advancing this purpose, this department secured industrial cooperation in the reduction of varieties, styles, colors, and finishes; the standardization of sizes, lengths, widths, etc., as well as economies in the use of samples, containers, and packages. Some measure of the extent to which the simplification program was carried is indicated by the following: colors of men's felt hats were reduced from 1000 to 9; sizes and types of steel plows were reduced from 312 to 76, of axles from over 100 to 1; 5500 types of rubber footwear were eliminated; colors of typewriter ribbons were reduced from 150 to 5; styles and sizes of washing machines were cut from 446 to 18, while in the case of household wringers agreements among manufacturers resulted in the elimination of over 90 per cent of the variety of output.

Following the war, American industry was able to continue this simplification program through agreement between manufacturers under the sponsorship of the Division of Simplified Practice of the United States Department of Commerce. The Division served as a clearinghouse for producers and distributors in various industries, aiding them in reaching mutual agreements for product simplification.

Simplification of finished products makes possible greater standardization of manufacturing operations. More specialized machinery may be used. Less time is wasted in resetting automatic machines or shifting labor around to new tasks. The number and variety of raw materials required may be reduced. It may be possible to purchase raw materials in larger quantities, thus

securing extra discounts which reduce basic material costs. The investment in inventories of semifinished and completed goods may be reduced. This in turn contributes to a reduction in the capital required to operate the business, cutting interest charges and, indirectly, reducing total costs, and increasing profits. Furthermore, the task of each worker is simplified, increasing skill and decreasing dead time required for machine resetting and other interruptions inevitably attached to change-overs in manufacturing. The advancement of simplification contributes materially to standardization at every stage of the manufacturing process. In this way, it aids in securing lower production costs, lower selling prices, a wider distribution of finished goods, reduction of waste, higher living standards for consumers, and higher profits for producers.

Problems of Simplification. If production were guided solely by the dictates of engineer-trained managers with a single-minded devotion to cost reduction, simplification of product lines would be no problem. The production man hates diversity; he knows that every variation adds to manufacturing costs. Diversity and variety are usually introduced by the managers of selling activities. These men know that consumers like variety and enjoy the freedom to select from a diverse array of products. They know that the company which caters to that consumer preference is in a strong selling position. They also know that the best way to remove a product from the dead level of price competition is to make it different from competing products in some significant respect (or in some way that consumers think is significant).

It is the salesman, therefore, who exerts the pressure to diversify the product line. He is the one who suggests a greater variety of colors, styles, materials, and sizes; he is the one who wants little distinguishing features; he is the one who constantly presses for new variations. He wants to be prepared to serve the preferences of all consumers and all retailers. He realizes, of course, that variety adds to manufacturing costs and, inevitably, to selling prices. But he knows that customers will pay for variety, up to a point.

One of the major problems of simplification centers, therefore, in the resolution through compromise of the conflicting attitudes and interests of production manager and marketing manager, of engineer and salesman. This compromise can best be secured

through a dual program of action within the industry and within the individual firm. The industrial program follows the line established during World War I in the interests of conservation and efficient utilization of materials and machines. The company program should proceed along a clearly defined path of scientific study of sales and costs.

Such a study should begin with the examination of income derived from various styles, sizes, and types of articles produced. Income figures should be balanced against costs for each variety. Such an investigation may reveal that a large proportion of the year's business has been done on a small proportion of the varieties produced. It may then be determined whether it is desirable to eliminate slow-selling items and varieties. This decision must be made in terms of the relation between income secured and cost incurred by each variety. Due recognition must also be given to the influence of the slow-selling variety on sales of the rest of the line. Some retailers may insist on the provision of a complete line of products by a manufacturer, including slow-selling items. The relative strength of this intangible factor must be included in the ultimate decision.

MATERIAL SUPPLY

The purchasing of materials presents one of the most difficult problems in industrial management. The purchasing task has the following objectives: (1) assumption of the responsibility for making available, as required, materials, equipment, parts, and supplies; (2) assuring that all goods purchased are of the required quality; (3) acquiring goods as efficiently as possible. These objectives depend on: (1) anticipation of requirements; (2) forecast of price and market trends; (3) skill in negotiating with suppliers; (4) careful selection of sources, giving due recognition to the factors of price, quality, service, and reliability.

The significance of the purchasing task in business may be appraised in terms of the following statement:

Census returns from the 210,959 manufacturing (and printing and publishing) establishments of the country indicated an aggregate outlay of $36,683,000,000 for raw and semi-manufactured materials (exclusive of fuels) used in these plants in 1929, about 35 per cent of which ($12,676,000,000) was for raw materials alone. . . . About two-thirds (67.3 per cent) of the cost of the crude materials consumed in manufactures went for those produced by agriculture and animal

husbandry. . . . Of the raw materials consumed, 82.6 per cent were of domestic origin; the remainder came from abroad. . . . The outlay for materials is the largest single item of cost for the average manufacturer. . . . For all manufacturing industries, the combined cost of materials, fuel, etc., was 54.7 per cent of the value of output in 1929. . . . Because of the relative importance of material costs and the demand for high-speed production, any prolonged industrial advance would be likely to bring about marked improvement in the selection, care, and use of materials. Furthermore, the fact that they, like machines, are inanimate and controllable as compared with industrial personnel focuses attention on materials as being excellent subjects for the realization of pronounced economies. The material organizations in industrial establishments, as a matter of fact, underwent a mild revolution in recent years, as attested by the increased number of concerns in which were to be found perpetual-inventory systems, specialized purchasing officials, salvage departments, material specifications, carefully laid out storerooms, and experimental and testing laboratories.[1]

Relation of Purchasing to Other Divisions. Every division of a business is affected by the way in which the purchasing job is done. The continuous employment of machines and labor depends on material supply in the desired quality and quantity, and at the right time. Failure to provide materials for production stops every manufacturing activity. On the other hand, overinvestment in inventory affects the financing aspects of management's task. Quality deficiencies in raw materials may be the source of poor performance of the finished product, resulting in loss of sales and customer good will. Similarly, the stoppage of plant operations because of a shortage of materials will cause delay in deliveries of finished goods, which again destroys sales possibilities.

Control of the Purchasing Task. The interrelation of purchasing and other managerial functions necessitates close control over every aspect of material supply. To be complete and effective, this control should extend not only to quantity and quality of materials purchased, but also to the purchasing organization responsible for material supply, the routine procedure set up for placing orders, the checking and testing of materials as delivered, and relations with resources. It is desirable, furthermore, to think through and agree on the broad outlines of purchasing policy. This is particularly important with respect to problems of hand-to-mouth versus speculative buying of materials, and attitudes toward prices of materials offered by resources.

[1] U. S. Bureau of the Census, *Materials Used in Manufactures: 1929*, U. S. Government Printing Office, Washington, 1933, pp. 43–44.

Should the purchasing division buy in quantities sufficient to maintain current factory operations? Or are there occasions when materials should be purchased in quantities sufficient to supply the factory for several months ahead? Should purchasing policy be adapted to price savings in raw materials? If so, how? To what extent? Should the purchasing division always buy from the lowest bidder? Are there occasions when materials should be purchased from other bidders, for the sake of maintaining relations with suppliers who may be needed in some emergency period? These, and similar questions of purchasing policy, must be appraised and agreement reached as a guide to the general line of action to be followed in the day-to-day operation of the purchasing division.

Complete and effective control over all phases of material supply is usually aided by centralizing the purchasing job in a single division. This centralization has the added advantages of making possible the employment of specialists in buying, eliminating duplication of orders by several departments, standardizing in buying supplies, and aiding in the placement of large orders on which extra quantity discounts may be secured. Centralization also makes it possible to concentrate authority and responsibility in the division, and to look to that division for effective performance of its task.

LAYOUT

The two most important administrative jobs in machine industry are organization and control. The importance of these jobs is clearly evident when we examine some of the problems of materials, machines, and work-flow which are encountered in studying factory design and layout.

The importance of carefully planned factory layout is indicated by the relation of plant layout to other aspects of business management. There is, in the first place, a direct relation between factory layout and costs of production. Since layout of a factory building directs the flow of materials through the various operations of production, a poorly planned building encourages inefficient flow of work. This leads to extra handling and storage costs, and unnecessarily lengthens the manufacturing process from raw materials to finished product. It may also be the cause of piling up idle hours for machines and workmen, as a result of interruptions to continuous operation.

Second, plant design and layout influence the size of the investment required to make possible a given volume of production. A factory building is designed to house machines to handle a volume of output planned in advance. Errors in the arrangement of departments, in the design of the entire building, or in charting work-flow may cause either under- or overinvestment in plant and machinery. Underinvestment — erecting a plant and installing machines incapable of producing at the required rate — defeats the purpose of the plant expansion. Overinvestment — erecting a plant and installing machines capable of producing more than the required volume — ties up more money than is needed. This, in turn, means dead capital and high financing charges. Errors in planning often necessitate redesign or rearrangement with accompanying additions to financial outlay.

Third, a well-designed factory building housing scientifically laid-out machinery may make a significant contribution to the high productivity of labor. This statement does not refer solely to full utilization of workers' time. An attractive, well-lighted, well-ventilated building, with machines distributed in such a way as to facilitate work and minimize interruptions, will lift employee morale. Among the results will be increased output, decreased waste and spoilage, a reduction of time-out periods, and relief for delays due to fatigue. Together, all contribute to reduced unit-production costs.

Problems of Plant Design. The design of a factory building and the layout of machines in the building logically begin with a careful analysis of the production process to be housed and carried forward: (1) the product to be manufactured; (2) component manufacturing processes required to turn out every part and assemble the completed unit; (3) machinery and equipment required in every stage of production; (4) flow of work from beginning to finishing operations; (5) space requirements of machines, men, transportation, service, and storage. The analysis portrays the modern manufacturing establishment as the equivalent of a huge machine, every part related to other parts, functioning smoothly only when each section has been designed in terms of its most effective contribution to the operation of the whole.

If a manufacturing plant is regarded as a giant production machine, it is relatively easy to visualize the major objectives of scientific design and layout. The guiding purpose is the erection

of a machine which will operate at a high level of efficiency. This necessitates adapting the plant to the requirements of the manufacturing activities to be carried forward within its walls. Some types of manufacturing activity require unusual space and light. These operations, particularly if they do not employ unusually heavy or vibrating machines, may well be undertaken on the upper floors of a building. In certain industries, such as foundry operations or automobile manufacture, solid floors are required to support the strain of heavy machines. These operations usually demand first-floor space.

Textile and shoe manufacturing are often carried on in buildings of several floors. Vertical construction may, indeed, be utilized to aid in transporting materials from one floor to another by gravity chutes. This type of construction is frequently found in flour milling. Automobile manufacture and steel operations favor single-floor plants permitting continuous horizontal work-flow. Whatever the shape or size of the building, planning for high-level efficiency requires careful study of processes, machines, and work-flow, as well as of space necessary for effective internal transportation of work and materials.

Machine Layout. We have already pointed out that manufacturing operations rest upon the assembly of materials, machines, and workers. Planning the layout of machines within a factory must be founded on the recognition that this triple assembly may be effected in three different ways: (1) materials and machines may be brought to the workman who is stationed at a fixed position; (2) workmen and machines may be brought to the materials; (3) workers and materials may be brought to the machines.

The first method is seldom used, because workers are the most mobile of these three production factors. Ship construction offers a good example of the transfer of workers and machines to materials; this method is likely to be found wherever the product is so heavy and bulky as to make its movement extremely difficult. The third method, which maintains stationary labor and machines, is the one most frequently used in straight-line production. It is the method of the assembly line in which automatic conveyors move materials and semifinished products past stationary workers and machines.

For this type of production important problems of machine layout arise in connection with the maintenance of uninterrupted

operations and the avoidance of unnecessary piling up of partly finished stock at various points along the production line. These difficulties are likely to become critical when subassembly lines feed into the main assembly line. In the manufacture of automobiles, for example, production is often designed along a main assembly line into which subassembly lines feed at various points, supplying parts to be fitted into the semifinished automobile. The rate of flow of work along main and subassembly lines must be intricately calculated to avoid both stoppage and piling up. Machine layout must be meticulously planned to secure the full economies of this complex mass production process.

THE MACHINE AND THE WORKER

Although a full discussion of labor in the industrial process is reserved for the two following chapters, a note must be included at this point on the influence of machine technology on the industrial worker.

The development of the modern industrial system could not have occurred without materially influencing the status of the factory worker. The use of continuous processes, the extension of the basic principles of division of labor, and the invention of intricately-engineered power-driven machines have combined to make the task of the factory worker simple and repetitive. A class of machine tenders has been developed, while more and more the necessary operations have been routinized. There remains a dwindling group of production jobs which require technical skills (principally in tool making), but these are not the typical mass-production jobs.

The machine has begun to displace the worker in many sections of modern industry. Even when the worker is not completely displaced, he occupies a position subordinate to the machine. The machine does the work. The laborer serves as starter and stopper, adjuster and guide. For the strains of physical exhaustion, the machine has substituted the strain of monotony, the fatigue of repetition. It may also be weakening that individualistic independence which characterized the pre-Industrial Revolution artisan. We must not fail to observe that there are many material compensations. The machine has multiplied productivity, raised living standards, and shortened working hours. But no descrip-

tion of machine technology can be regarded as complete which does not point out the effects on labor.

The Impact of Invention. A further influence of the machine on the worker is encountered when we consider the problem of technological improvement, the role of invention in modern industry. Every student of the Industrial Revolution has commented on the rapidity of change which has characterized this era in human civilization. With every passing year the rate of change appears to increase. Within four decades since the start of the twentieth century, the telephone, the automobile, the airplane, the radio, and the moving picture have become commonplaces of daily life. Fifty thousand patents are granted annually to inventors, many of them covering discoveries or improvements capable of exerting a significant influence on industrial society. The stable, slow-moving, predictable world of the artisan is gone forever. The modern industrial worker is at the mercy of technological change, the rate and direction of which he can neither predict nor insure against.

Let us at this time consider only one aspect of the problem introduced by invention in machine industry — that of technological unemployment. The worker has always distrusted the machine. The first attempt to introduce machinery in the British textile industry in the second quarter of the eighteenth century was met with widespread workingmen's riots, machine breaking, and the persecution of inventors. One of the early inventors of textile machinery was forced to flee the country, while another went into hiding.

Every period of business depression with its spreading disease of unemployment has witnessed a revival of this fight against the machine. While the proponents of change point to the jobs created by the machine, its enemies trace the mounting technological unemployment, the case of labor displaced by the machine, the scrap pile of human lives. Are these critics right? Is labor permanently thrown out of work by the machine? Should we call a halt to invention? Shall change be strangled?

A number of searching studies of this problem of invention and the worker have concluded with the observation that it is extremely difficult to measure accurately the effect of technological changes on industrial employment. They admit, however, that at any given period there exists a substantial volume of workers

unemployed because of displacement by machines. Whether this is a permanent situation is not so clear.

Some workers forced out by the introduction of machines find jobs in other industries. But it is often difficult, even in prosperous times, for a worker to acquire the requisite skill to secure employment. He may be too old to learn a new trade. He may not know of employment opportunities in other localities. Many who do find new employment are forced to accept less skilled jobs at lower wages. In periods of business depression these difficulties are increased.

The volume of unemployment which can be traced to factors arising out of technological change is great enough to emphasize the seriousness of the problems introduced by inventions. Part of the impact of change on labor can be eased by more widespread ventures in adult education and in programs for retraining workers in new skills. But it would be foolish to pretend that this is a complete solution. It may be, as some would argue, that a moderate amount of technological unemployment is a small price to pay for the achievements of machine industry. It may also be that there still remains a job of taming the machine, of bringing it more closely within the control of intelligent business management. Certainly the relief of the social shock of invention is a challenge to managerial talents.

QUESTIONS, PROBLEMS, PROJECTS

A

1. In general, what does productive effort endeavor to do?
2. What are the five principal distinguishing characteristics of the mass production technique?
3. When did standardization of products begin?
4. Why is it wasteful to introduce even a slight change into the manufacture of the product?
5. What is the most obvious consumer benefit from standardization?
6. Since variations are always somewhat expensive, why is it necessary to have them at all?
7. What is the process of simplification? How, for example, would it be applied to the different kinds of steel plows produced?
8. What effect does simplification have on standardization?
9. Why do production men want more simplification, while men interested in selling activities want less?
10. Why is the purchasing task important?
11. Why is it a good idea to centralize the job of purchasing in a single division?

12. Give three reasons why a planned factory layout is desirable.
13. Manufacturing operations rest upon the assembly of workers, machines, and materials. What are the three ways in which this assembly may be accomplished?
14. What are the social consequences of replacing hand labor with machine labor? What are the economic consequences?

B

1. Standardization is always accompanied by a high proportion of machine production and a complex division of labor. Why is this true?
2. If standardization of products is thoroughly desirable, why are so many people keenly interested in getting hand-made goods such as rugs, woodwork, etc., which are certainly not uniform?
3. Although the worker on an assembly line is certainly a specialist, is he a skilled worker in the same sense that a carpenter is? Does this make him more or less dependent upon the decisions of his employer?
4. Has standardization increased or decreased the standard of living of the laboring classes? Why? Has it increased or decreased the standard of living of the owning and managing classes? Why?
5. What does the phrase, "economies of uniformity versus sales opportunities of variety," mean?
6. The basic job of any economic activity is to satisfy consumer wants. What bearing does this have on the problems of variation and simplification?
7. What factors must be taken into consideration in resolving the problem presented by the conflicting interests of the production man in standardization and the marketing man in variation?
8. Does standardization make a planned layout more essential than formerly? Why?
9. What would be the differences in the factory layout for shoes, for flour, for automobiles, for steel production, for textiles, for radios, for bombs? Explain the reason for each difference.
10. Mass production requires meticulous planning in order to be efficient. Meticulous planning is expensive. Mass production demands standardization in order to be efficient. But standardization decreases the attractiveness of the product produced, thus making it harder to sell. Mass production requires a well-trained, efficient purchasing division — another expense. Do the benefits of mass production offset these costs?
11. What are some other costs which travel in the wake of the highly touted economies of mass production?
12. Is it true that in some areas of economic activity mass production would be more uneconomical than economical? What are some of these areas?
13. Evaluate the statement that the introduction of new machinery does not throw laborers out of work in the long run because the displaced laborers can readily get jobs producing the new machinery. Is there any truth in it? What are its fallacies?
14 "Technological developments mean that factories can produce more goods of a better quality in a shorter period of time, and with fewer costs, than before.

Thus, a factory will employ more machines and fewer men in the job of transforming raw materials into finished products. Costs of production will be decreased. Efficiency will be increased. Prices will be lowered. More people will be able to buy the product. More goods will be produced. Thus, in the long run the standard of living will be raised." Is there any sense to this line of argument?

C

1. Make a list of products which are ideally suited for standardization. Make a list of products whose manufacture cannot be standardized without destroying their market.
2. Conduct a study of some industry to which you have ready access. How is the plant arranged? Do they use an assembly line? Are there many variations in the finished products or is there complete standardization? Do they have storerooms for raw materials? Who determines their purchasing policy? Are there any jobs done by men which could obviously be done by machinery, indicating a company policy to suppress technological developments?
3. Write a paper arguing for or against the suppression of technological developments in order to preserve security of employment.
4. Prepare a history of the development of production techniques in the automobile industry. How do the methods of today compare with the methods of 1915?
5. Do the same job with the shoe industry. How do the methods of today compare with those in the twelfth century and subsequent periods?

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CHAPTER 15

LABOR

The Industrial Revolution has transformed American society. No aspect of the process of living and working has escaped its influence. However widespread have been the changes, the roots of which can be traced back to that single source, in no area of our economy have there been created upheavals as profound, or problems as challenging, as in the field of labor. Conditions of work have been revolutionized. The position of the worker in industry has undergone a far-reaching readjustment. Terms of employment, risks, protection, and insurance have altered, and wholly new problems have made their appearance. Employer-employee relationships are unlike anything known in the era of the petty capitalist and the artisan. The workingman's attitudes toward society, his employer, and his fellow workers are taking new shapes within our own lifetime.

It is to the discussion of these problems that this and the following chapter will be devoted. In the present chapter we shall study the supply of labor and the conditions of employment; in Chap. 16, the problems of organized labor and collective bargaining.

THE SUPPLY OF LABOR

Labor power is distinguished by one characteristic not found in materials or machines. The potential production inherent in raw materials and machines can be stored. There are few perishable raw materials. Coal and iron ore not used today stand ready for future use. A machine is worn out by use. It does not deteriorate in idleness (although it may become obsolete because of new inventions). But an idle workingman represents an inescapable social loss. Today's labor power can never be recovered. Because of this unique characteristic of human labor, it is important to distinguish between the total available supply of labor power in the United States and the volume of employment. They represent different things and the margin between the two figures can be regarded only as social waste.

On April 1, 1940, more than 45 million individuals were reported as gainfully employed. One-quarter of this group were women, three-quarters men. It is interesting to compare this volume of employed labor with the record of employment of labor through our history.

Volume. In 1870, roughly 12.5 millions were reported as gainfully employed. This increased to over 23 millions in 1890, to 29 millions at the turn of the century, to over 38 millions in 1910, to 41.6 millions in 1920, and reached a peak of 48.8 millions in 1930. It is obvious that the single most significant responsible cause for this growth in the number of gainfully employed was the rapid increase in the population of the country. In 1870 there were about 28 million individuals ten years old and over in the United States. By 1940, this figure had increased to more than 108 millions.

Occupation. Parallel to the growth in the volume of gainfully employed have come changes in the distribution of workers in the various occupational groups. The most striking change has occurred in the case of agriculture, which for more than 50 years has steadily declined as a source of livelihood. Whereas 44 per cent of all gainfully employed workers were found in agriculture in 1880, by 1920 this had fallen to 26 per cent, and by 1940 to about 20 per cent. Only one-fifth of the working population was employed in manufacturing in 1880. In 1940, the number employed in manufacturing made up almost two-thirds of the total number of the gainfully employed. Trade, transportation, and communication gave employment to twice as large a proportion of the working population in 1940 as in 1880 (in absolute figures, a 500 per cent increase).

In the same period, the proportion of the working population engaged in professional service and trade (including doctors, lawyers, teachers, and other professionals) has doubled. More recently, in the two decades since 1920, an increasing proportion of the employed have entered the fields of transportation and communication, and clerical and personal service occupations.

Immigration. A brief statement about the effect of immigration on the supply of American labor must be included. Throughout the latter half of the nineteenth century and up to the outbreak of World War I in 1914, the flow of European labor into the United States was one of the greatest single supports of American

industrial expansion. The flood of immigrants provided a vast labor reservoir for the new giant industries. By taking over unskilled jobs, the immigrants pushed up many native-born workers into classifications of higher degrees of skill. To a large extent, also, the great number of immigrants forced the maintenance of low wage scales for unskilled labor by their fierce competition with one another. But it must be remembered that it was immigrant labor which flung the young American railroads across the western plains and stoked the roaring fires of industry.

Recent Trends.[1] Examination of census data running back through the decades makes possible certain other interesting observations about trends in the economic status of the gainfully employed.

1. There is evidence of a continuing increase in the proportion of the gainfully employed who are employees, that is, who work for others. There is, of course, a parallel decrease in the proportion of independent proprietors and managers. Almost three-fourths of those now at work can be classed as employees.

2. If employees are divided into the classifications of "manual" and "brain" workers, grouping in the first division those engaged primarily in physical labor, there can be observed a steady increase in the ratio of brain workers to manual workers. To a large extent this can be traced to technological developments.

3. If employees are classified into those engaged in producing material goods and those rendering services, there can be observed a steady increase in the proportion of workers engaged in rendering services. This can be traced to the increased productivity of workers in industry, and the growth in trade and service activities.

Size of Business Unit. Some attention has already been devoted to the growing importance of the large business unit within the American economy. This development can be traced in every area of economic activity. It has appeared in manufacturing and in retailing, in raw-material supply, in transportation, and in communication. Measured in terms of numbers of units, there are still many times as many small firms as large ones in most industries, but the large firms are usually the dominant companies, and employ the greatest amount of capital and labor.

[1] For a more complete discussion of these trends, see Harry A. Millis and Royal E. Montgomery, *The Economics of Labor*, McGraw-Hill Book Company, Inc., New York, 1938, Vol. I, pp. 33–38.

In 1940, business units employing less than 100 workers made up nine-tenths of all business units engaged in manufacturing, but employed only three-tenths of the wage earners. Business units employing more than 500 workers made up about 1 per cent of all establishments engaged in manufacturing, but employed more than one-third of all wage earners. Although the development has not been uniform throughout the American economy it can be observed that an increasing proportion of workers are employed by large enterprises and that a handful of large concerns employ a surprising proportion of all wage earners.

Certain consequences can be observed as a result of this development. The large business unit is usually, although not always, a healthier, safer, and cleaner place in which to work. In such enterprises one is apt to discover greater attention devoted to scientific management and work planning, and a more thoroughgoing study and administration of labor relations. The large enterprise necessarily sacrifices personal relationships for a degree of impersonal uniformity. To this breakdown of close employer-employee ties can be traced many of the problems in the field of labor which will be discussed in the following pages.

It should be observed that labor relations in small units give rise to problems no less difficult than those encountered in the administration of large units, although often of a somewhat different character. Nevertheless, since we have observed that the majority of all workers are employed by corporations, which have shown a long-continued tendency to increase in size, this discussion of labor will be phrased generally in terms of the medium and large business unit organized in the corporate form.

Increase in Capital Investment. Among the most significant industrial developments affecting the supply of labor has been the increase in the amount of capital invested in the form of buildings, machines, and power. Study of wage earners and power used in manufacturing reveals that in 1940 each factory worker was equipped with five times as much power as in 1870. Within the first 40 years of the present century, industry has been adding to its investment in plant and machinery roughly twice as fast as it has been adding to its labor force. These changing proportions of capital investment and labor have given to each worker more machines and power, which have made possible a rapid increase in the productivity or output of the individual employee.

The Number of Unemployed. At the opening of this chapter attention was directed to the necessity for distinguishing between the total available supply of labor power in the United States and the volume of employment. The difference between these two figures measures the volume of unemployment. Since unemployment represents both social waste for the economy as a whole and bitter personal tragedy for the individual and the family, it is desirable to make an attempt to describe its extent in the United States.

Problems of Enumerating. It must be said, in the first place, that it is very difficult to calculate the number of unemployed workers. Even if the ill and the shiftless are eliminated from the count, so that an unemployed person can be defined as one who is willing and able to work, but cannot find employment, it is not easy to measure the number of unemployed. There are several reasons for this difficulty.

Every year a large number of elementary-school, high-school, and college graduates enter the labor market. They must be counted among the unemployed until they have secured jobs. Yet, never having been released from other employment, they are easily omitted from a calculation of the number of unemployed. There are other changes in the number of the unemployed caused by the general trend of business activity. In prosperous times, one breadwinner may support an entire family. But if the father's salary is cut in a depression period, or if he loses his job, the mother and one or more grown children may seek employment to supplement the family's income. In this case, reduction of earnings or unemployment of one person may add as many as three or four to the roll of the unemployed. Further problems are introduced, in the category of "ability to work," by legal obstacles, such as regulations governing sight or hearing handicaps or the employment of married women. Still others arise, in the category of "willingness to work," as a result of the refusal of the unemployed worker to accept an inferior job or one in a trade in which he is not skilled. Should an accountant be classed as unemployed if he refuses to accept work as a ditchdigger? Still another difficulty is encountered in connection with the older man who is beyond the customary hiring age. What of the man of sixty who seeks a job to supplement a family income suddenly reduced by the marriage of a daughter who had previously held a job and contributed to the family's support?

For all these reasons, it is difficult to compile an accurate listing of the unemployed. With the exception of a few scattered and unreliable measurements, there has been until very recently no planned and organized attempt to make a careful count. In 1937, the government undertook a mail census of the unemployed. Voluntary registration cards were sent to more than 31 million families. On the basis of this voluntary census, it was estimated that the unemployed in November, 1937, totaled approximately 11 million individuals.

Estimates of Unemployment. In addition to official tabulations of the number of unemployed workers, estimates have been made periodically by the American Federation of Labor and by other agencies both public and private. These estimates, based upon separate calculations made in a variety of ways, have been anything but uniform. The estimates of the American Federation of Labor for annual average unemployment placed the figure at 4.7 millions in 1930, 8.7 millions in 1931, 13.1 millions in 1932, and 13.7 millions in 1933, the low point of the depression. This compares with statistics of the Alexander Hamilton Institute, which recorded annual average unemployment at 7 millions in 1930, 11 millions in 1931, a peak of 14.8 millions in 1932, and 14.3 millions in 1933. Other estimates placed the volume of unemployment substantially below these figures.

All estimates agree that the volume of unemployment in the United States increased from 1930 to about April, 1933, reaching a peak estimated at between 11 and 16 millions. From this peak, the number of the unemployed declined as general business activity picked up. By September, 1937, it had fallen to from 8 to 9.5 millions. It increased again with the recession in business activity which began at that time, and again moved down after the turn of the year. The intensification of the national defense effort after 1940 caused a rapid drop in the number of the unemployed. In connection with these figures, it should be remembered that unemployment varies industry by industry, and that no attempt has been made to describe such variations.

Testifying before the Temporary National Economic Committee, Commissioner of Labor Statistics Lubin estimated that, taking 1929 employment as normal (although there were several millions unemployed even in that year of peak prosperity), in the following 9 years over 43 million man-years of work were lost

because of unemployment. We may translate these statistics into the statement that on the average as much as 12 per cent of the available working population is unemployed.

The Causes of Unemployment. The volume of unemployment and its relation to periods of business prosperity and depression should be sufficient to dispose of the challenge that anyone who really wants a job can always get one. The implication is that unemployment, at least for the willing and the capable, is either self-induced or a myth. Observation and careful survey reveal several direct and indirect causes for widespread unemployment. It should be observed that it is often unfair or misleading to attribute unemployment to a single causal factor. It might, therefore, be more accurate to state that there are several causes of unemployment, one or more of which may be active in any particular situation.

Maladjustments of Supply and Demand. The first group of factors may be summarized under the general heading of maladjustments in the supply of and the demand for labor. In this group may be included instances of unemployment occurring when there are available skilled workers in one trade for which there is no demand, and demand for workers in another trade in which there are no available skilled workers. There may be, for example, a demand for skilled workers in airplane manufacturing, and no supply, while at the same time there are a large number of unemployed carpenters seeking employment. In this group may also be included unemployment arising when there is a demand for workers in one part of the country, and a surplus of workers of the requisite skills in another part. These maladjustments of supply and demand occur because workers cannot transfer readily from one industry to another, or from one section of the country to another. Transfers between industries often require the worker to learn a new trade, which is usually difficult and time-consuming, and, in the case of older workers, often impossible. Transfer between regions is delayed by workers' ignorance about employment possibilities at a distance, and by a natural disinclination to disrupt established homes and family ties.

Employer-employee Frictions. A second group of factors may be summarized under the heading of employer-employee frictions. This includes all cases of unsatisfactory job relations, ranging from disagreements over quality of workmanship, general job compe-

tence, and observance of shop rules, to personal frictions between worker and foreman. Either side or both may be to blame. Turnover of labor force traceable to this cause is frequently an indication of poor personnel administration by the employer.

Technological Change. Other workers may lose their jobs because of the introduction of a new machine or of a new manufacturing process which displaces labor or requires the employment of a different kind of skill.

A brickmaking machine can turn out over 40,000 bricks an hour, whereas under the old methods with human labor only 55 bricks could be produced. This means that one worker can do with the help of the machine what 727 workers, without the machine, used to do. In the loading of pig iron, recent inventions have enabled 2 men to do the work of 126. In the paper-making industry, a single machine takes the place of over 125 workers. One machine for making electric light bulbs can turn out as many as 1,000 workers used to make. A giant web press can today print, fold, and count over 40,000 24-page newspapers an hour, about 3 times the production of the average web press of 30 or 40 years ago. In a study for the Works Progress Administration entitled "Unemployment and Increasing Productivity," it was shown that, on the whole, man-hours per 100 units of output have declined from 100 in 1920 to 56 in 1934; in other words, only half as many men are now required to turn out a given quantity of production as were required in 1920. Hence if we were producing as many goods now as we were then we would have still many millions of unemployed.[1]

In addition to direct displacement of workers by machines, technological improvements may cause displacement as a result of one or more of the following: (1) transferring production from one plant to another; (2) reducing consumption of raw materials or fuel by decreasing waste and spoilage; (3) offering an effective substitute for an existing product; (4) reducing labor required by increasing efficiency.

Seasonal Industries. Still another cause of unemployment is the regular seasonal fluctuation of sales and production in many industries. This fluctuation may be small in some industries. But in others, such as canning, ice-cutting, furs, and clothing, there are periods of intense activity followed by periods of complete cessation of work. Workers in these industries must either endure seasonal unemployment or seek jobs in other industries.

Depressions. The causes of unemployment listed above are not necessarily associated with either prosperity or depression. They

[1] Emanuel Stein, Jerome Davis, and others, *Labor Problems in America*, Farrar & Rinehart, Inc., New York, 1940, pp. 40-41.

are inherent in the free-enterprise economy. The periodic instability in general business conditions and, in particular, the downswing in business activity which is usually described as depression must be included as a major cause of unemployment. Not only are workers thrown out of jobs at such times, but the effect is cumulative in almost every industry. And in addition to these general depressions which periodically slow business activity throughout our economy, there are also single-industry depressions induced by changing legislation, or by widespread change in the demand for products.

The Labor Reserve. In connection with this discussion of unemployment, some attention should be directed to the question of the labor reserve. Many students of the capitalistic, free-enterprise economy have endorsed a belief in the desirability of maintaining a reserve of unemployed labor as essential to the efficient functioning of the economy. They point out that industries must be free to expand or contract quickly in response to price movements. To make short-run expansion possible there must be a group of workers who can be hired and immediately put to work. Even in a period of such acute labor shortage as 1918 there were over one million unemployed, largely as a result of the high rate of labor turnover in many industries, the resistance of workers to geographical transfer, workers with unwanted skills, and the group of unemployables.

Debate about the labor reserve does not deny the necessity of maintaining a surplus labor supply in a free-enterprise economy. But students of the problem question the size of the reserve. It is argued that the surplus labor supply has been consistently in excess of the necessary minimum. Insofar as this is true, the desirability of maintaining a labor reserve neither explains nor excuses widespread unemployment.

SELECTION AND TRAINING

Management's attitude toward labor, responsibility for labor, and relations with labor can be conveniently summed up in the phrase "personnel administration." The significance of personnel administration is indicated by the fact that labor is one of the most important costs incurred in production. Not only is labor an important cost; it is a variable cost subject in large part to man-

agement control. And it is a cost incurred in the employment of humans whose efficiency and morale are maintained as much by working conditions, individual relations, and intelligent direction of training, transfer, and promotion as they are by the size of the wage payment.

Personnel Administration. The important aspects of personnel administration include the following: (1) securing an adequate supply of workers of all types necessary for the efficient operation of the business; (2) training employees for their jobs; (3) maintaining a high level of efficiency and morale among employees; (4) preparing a reserve of employees for promotion to higher positions; (5) directing employer-employee relationships so as to adjust controversies and effect equitable solutions; (6) reducing labor turnover. Although the solution and administration of the employee's compensation plan is often assumed as a direct responsibility by the management of a company, the personnel division is concerned with this problem, as well, because of its effect upon employee relations and other aspects of the personnel function.

It should be observed that these personnel functions must be performed in enterprises of every size from the smallest to the largest. They are administered by a special division in the large concern. In the small firm they are only one of the tasks of the manager. They present more complex and difficult problems in the large concern, because of the number of employees involved and because relations must be maintained on an impersonal basis. It should also be remembered that although certain general principles of good personnel administration can be assembled from the experience of business enterprises, the personnel program of every company must be built upon its own needs and adjusted to its own problems.

Hiring the Worker. The hiring process varies all the way from hanging out a sign, "Man Wanted," to a detailed, scientific comparison of the tested aptitudes of selected candidates and the established requirements for the jobs they are to fill. Inasmuch as hiring and training the individual worker is expensive (in many instances the new employee is not worth his salary for several months), the recent trend has been toward a discriminating administration of the hiring process. This has been true, particularly, in the case of applicants for positions requiring special aptitudes or skills and for those selected for junior executive jobs holding out the

promise of promotion to more responsible senior positions. The hiring process is simple when applicants are being considered for routine jobs requiring little special skill. Even here, however, there is increasing recognition of the desirability of centralizing responsibility for hiring and taking some precautions to eliminate the physically or mentally unfit and the "floaters" or transients little disposed toward continuous employment.

Job Analysis and Specification. The beginning of an intelligent hiring program is a thoroughgoing job analysis. This is the process of breaking down every job into its component operations and studying each operation to determine the strength, skill, and speed necessary for satisfactory performance. Careful job analysis should enable the employment supervisor to establish minimum standards of strength, aptitudes, and skills with which to appraise applicants. A complete job analysis should include every feature of a particular task which may bear on the problem of selecting applicants. It should include statements of temperament and personality traits which should be looked for or avoided.

Job specifications are based upon complete job analyses and represent the written statements of physical, mental, and personal qualifications sought in applicants, together with descriptions of operations in every job, wage rates, working conditions, and prospects for promotion.

Interviewing. Prospective employees may be recruited by advertising, by requesting employees to recommend applicants, by interviewing high-school, trade-school, and college graduates, and from employment agencies. However they are secured, it is customary to ask candidates to fill out an application form and to submit to a personal interview. The written application form helps to weed out the obviously unfit. The personal interview serves to display the personality and temperament of the applicant and permits a more searching inquiry into important aspects of his training and experience.

No attempt will be made in this limited space to discuss the technique of the personal interview. The reader should bear in mind, however, that good interviewing is not easy. It requires an unusual adaptability on the part of the interviewer to enable him to direct the conversation along desirable lines and to fit the replies of the applicant into a complete pattern of skills, experience, personality, and character.

Testing the Applicant. In addition to the written application statement and the personal interview, recent developments in personnel administration have encouraged the use of intelligence and aptitude tests. Intelligence tests were first used on a large scale by the Army during World War I. They have been adopted by industry as a valuable aid in employee selection, although controversies have developed over their interpretation. There is fairly wide agreement on the value of general intelligence tests in weeding out applicants whose mentality is so low as to render them unfit for the jobs at hand, and in directing others with limited mental capacities into lines of work for which they are fitted. Although these facts may serve to establish rough classifications of general intelligence, they may not measure accurately special types of intelligence required for particular jobs. They must be used with caution.

The employment manager is interested not only in the general intelligence of the applicant, but also in the special intelligence or aptitude required for a particular job. To some extent he may discover this by means of aptitude tests. For example, the task of assembling parts of a radio set requires manual dexterity in handling small pieces of wire and metal. An applicant may be tested for dexterity by giving him a number of small pieces of metal to fit into a pattern, or by some similar device which calls for a demonstration of the qualities required by the job itself.

The whole area of testing job applicants remains a controversial one, although the past two decades have seen a growing interest in and critical appraisal of testing techniques. It is possible that part of the dissatisfaction with such tests, expressed by those who have tried and discarded them, can be traced to failures or mistakes in selecting and administering the tests rather than to failure of the tests themselves.

Training Methods. Business executives have been devoting increasing attention in recent years to training after initial employment. A major part of this educational work is within-the-plant and on-the-job training, but there are many instances of cooperative-training programs sponsored jointly by firms in a single community and the local school system or divisions of the state and federal governments. Some of the more important types of educational and training methods will be described in the following paragraphs.

Apprenticeship. The institution of apprenticeship can be traced to the earliest period of handicraft. It was organized on a legal foundation by the medieval guilds which bound a learner to a master for a period of years during which he could absorb the details of his craft. Modern machine-production methods have reduced the number of crafts which require the slow and careful preparation characteristic of the apprenticeship system. But there still remain a number of industrial jobs requiring a high degree of skill, for which an apprenticeship program offers the best training. The Ford Motor Company has sponsored one of the outstanding apprentice and training programs, as the following description suggests.

The Trade School enrolls boys between the ages of 12 and 15. It is operated on a cooperative basis and until the academic work is completed one week is spent in class work and the following two weeks in shop work. During the summer each boy under 18 is given three weeks' vacation, and one additional week at Christmas. This provides 14 weeks of class work, 34 weeks of shop work and 4 weeks of vacation. Boys are paid 15 cents per hour at entrance, their pay being adjusted eight times a year, according to accomplishment. The maximum rate is 60 cents.

All work done in the Trade School is productive work. Younger boys repair small tools and safety goggles. All the precision tools of the company are repaired by boys who have had more experience. Older boys engage in the manufacture of tools — cutters, reamers, drills, arbors, and special tools.

One man devotes his attention to routing the boys through the shop so that they may have a varied experience in many of the twenty-five departments. Boys who are adapted to tool-making have their work apportioned about as follows: shaper, three months; lathe, four months; milling machine, five months; grinder, five months. When they are graduated at 18 they have a good grounding in mechanics. An idea of the quality of their work is indicated by the fact that spoilage on fine tool work, involving accurate dimensions in many cases from 0.003 inches to 0.0001 inches and finer, has averaged less than 1 per cent on an average output in excess of one million hours.

Academic training is closely correlated with the shop work and includes mathematics through plane geometry, shop theory, mechanical drawing, English, physics, general chemistry, qualitative and quantitative analysis, metallography, civics, economics, and geography.

All apprentices must attend class work provided by the school. Any Ford employee may attend classes for which he is qualified, but only apprentices receive the shop instruction. Apprentices in the tool and die rooms, electrical department, heat-treat department, and power house now number 1,600. Shop instructors have full control of the apprentice during his training period in the shop. The instructor assigns a student's first task, sees that he has work to give him progressive training, transfers him to other types of work, keeps a record of his work

in both class and shop, and recommends him for pay increases according to his progress. The shop instructor shows the apprentice as much as may be necessary about the machine he is to operate, sets up the job if necessary, and supervises the work of the apprentice throughout.

In June, 1935, the Ford Motor Company opened the Ford Training School for about 200 high school graduates. The chief purpose is to give boys who wish to enter industrial work an opportunity for a brief training of a few weeks or months before being transferred to a permanent location. Students receive $22 per week and are given typical toolroom work suited to their ability. Those who appear particularly capable may be placed in the toolrooms as apprentices when there are openings. The Training School provides an opportunity to enroll 800 recent graduates of high schools annually, who are absorbed by the Ford Motor Company in almost every department of its activities.[1]

The importance to American industry of a developed and continuous apprenticeship-training program was clearly demonstrated in 1940 at the onset of the national defense effort initiated in that year. During the depression period following 1930, many industrial concerns abandoned their apprenticeship programs because their executives saw no opportunities ahead for employing those who completed their training. A number of trade-union leaders urged this abandonment of the apprentice system. They thought it unwise to continue to train apprentices for trades when older skilled workers were unemployed.

The rapid industrial expansion of 1940, vital to the effective execution of the defense program, was seriously handicapped by a shortage of skilled workers, particularly in the tool-making and die-making crafts. Failure to maintain apprenticeship programs during the preceding decade was a significant contributing factor to this difficulty. Nor was it a condition which could be quickly remedied. The development of a skilled toolmaker required from two to four years. The deficit of skilled workers could be repaired, but it was the cause of endless delays in rearmament.

The Vestibule School. Less formal than the systematic apprenticeship program is the "vestibule" school. This term is applied to a training device utilized by many industrial concerns. In the vestibule school, new employees are provided special instruction in the specific operations they will be called upon to perform in the plant. The instruction is carried on in a section of the factory away from the production centers. The vestibule school does not

[1] National Industrial Conference Board, *Training For Industry*, New York, 1937, pp. 11–12.

aim at providing a rounded training program, nor does it usually include instruction of an academic nature. It concentrates upon rapid instruction in specific operations and machine control, aiming to prepare the new employee as quickly as possible for a single factory job.

On-the-job Training. One step beyond the vestibule school may be listed on-the-job training. In many factories an experienced worker is assigned by a foreman to supervise the work of a new employee in his department and instruct him in correct methods. This is an informal type of training, the success of which depends on the cooperative spirit which can be encouraged, and the ability of the older worker to teach what to him has become second nature. Further, it represents a waste of time for the skilled worker who might otherwise be employed directly in production.

Executive Training. Training in industry is not limited to new employees. At a higher level many companies are continually engaged in sponsoring or cooperating with executive-training courses. The purpose of these programs is to improve the work of foremen, "straw bosses," and junior executives, and prepare them for advancement to positions of greater responsibility. They are job insurance programs for both employers and employees.

The importance of systematic training at the foreman and junior-executive level should not be minimized. These are key positions in personnel administration, particularly in large organizations. Foremen and junior executives execute the policies of top managers. Their personal relations with the workers in their departments, the confidence they inspire, and the level of morale they maintain will make or break the entire personnel policy of their organization. They hold the power to create harmonious employer-employee relations, or to contribute to frictions and discord which destroy the quality of output, increase waste, lead to transfer of skilled workers, invite labor disputes and strikes, and increase labor costs throughout the plant.

Foremen and other junior executives must be helped to become better teachers. They must be led to understand something of the play of personalities in business relationships. They must have a thorough grounding in the basic personnel policies of their organizations, so that they can put those policies into action sympathetically and effectively. All good training moves from the top of the administrative organization down through successive levels of

supervisors. It becomes effective only with the intelligent co-operation of men at every level.

COMPENSATION METHODS

Wages are commonly regarded as the most important factor in employer-employee relations. The view is widely held that if wages are maintained at satisfactory levels, workers have no cause for grievance; the converse of this proposition is that wages are the source of most of the disagreements between management and labor.

Study of the history of labor in the United States suggests that those who subscribe to the simple truth of such statements are seriously misled. It is true that wages are significant in creating a feeling of satisfaction or dissatisfaction among workers. But there are many factors other than wages which must be considered. Even if we confine our attention to wages alone, it is not merely the *level* of wages which should be studied. Of almost equal importance are the type of wage-payment plan selected and the purchasing power of wages (that is, how much goods and services can be purchased by a given wage).

A straight salary plan of compensation does not affect either workers or managers in the same way as does an incentive plan of payment. And, in the area of purchasing power, what may be a satisfactory level of wages during a period of low prices may be unsatisfactory during a period of high prices.

The Theory of Wages. A number of theories have been advanced by economists and business men to explain how general wage levels are determined. None has won universal acceptance. They have value, however, in indicating the limits between which wage levels must fluctuate, and they suggest some of the factors which influence the level of wages set by a business enterprise.

One of the oldest of the wage theories is that which explains wage levels in terms of the *cost of subsistence.* This suggests that wages are held at a level sufficient to maintain workers at a bare subsistence, just enough to keep them alive and reproduce the labor supply. This theory, which no longer has any wide acceptance, does indicate that there is a lower level below which wages cannot fall for any prolonged period. But it is obvious that many groups among the working population have been successful in maintaining their wage levels well above the point of bare subsistence.

The *productivity theory* suggests that the wages of labor are determined by the value of the service rendered by the workers. Labor gets what it produces. This theory clearly aids us in establishing an upper limit to wages. If for any prolonged period workers succeed in securing wages in excess of the value of their products, employers will be forced into bankruptcy. But it is difficult to appraise the exact value of the services rendered by workers in a mass-production plant, so that it would be surprising if many workers secured wages equal to their productivity.

Another theory of wages, often described as the "bargaining theory," suggests that employers and employees in any plant set wage levels after a process of bargaining which usually results in a compromise agreement. This line of reasoning is helpful in explaining wage rates in some industries in which the workers are organized in strong unions. It does not offer a reasonable explanation of wage levels in plants in which the employees are not organized.

In addition to these and other theories of wages, business men recognize a number of independent factors which influence wage levels in individual communities and enterprises. Among them may be listed the following: (1) the relation of the supply of labor of the desired skill and the demand for that labor; (2) competitive conditions in the industry (how much are competitors paying for similar workers?); (3) cost of living in the community; (4) wages paid by other firms in the region; (5) extent of labor organization in the industry and in the community; (6) the availability of machinery to replace workers (if wages are forced up too high, workers may be displaced by machinery). At various times and in various combinations, these factors affect wage levels.

Types of Wage-payment Methods. Wage-payment methods may be divided into two classifications: time-wage plans, and incentive-wage plans. The time-wage plan is clearly the simplest type of compensation method from the standpoint of both employers and employees. Incentive-wage plans, of which an almost endless variety have been devised, are more complex and expensive to administer.

Time Wages. Under a time-wage payment plan the worker is paid a specified amount for a specified time period. He receives $7.00 a day, or $150 a month. He is paid the specified wage regardless of the amount of work he does.

There are many occupations in which it is difficult or impossible to measure a worker's output in units. Watchmen, policemen, and pay-roll clerks fall into this category. There are other occupations in which stimulation of labor to a high rate of productivity is not necessary or even undesirable (production of goods of unusually high quality, when speed would mean a dangerous sacrifice of care in workmanship). And there are still other occupations in which the worker's output is determined by controlled machine speeds, as in an assembly line forced to function at the speed of the automatic conveyor. In all these instances it would be difficult, undesirable, or impossible to devise an incentive payment plan.

In setting a rate for time wages, the employer must have in mind some general level of expected output. But in the absence of conditions suggested by the examples in the preceding paragraph, he may be dissatisfied with the failure of the payment system to provide an incentive for workers to increase their output by speeding their operations. The time-payment plan invites a deliberate slowing of operations in order to stretch out the work. It has been observed that construction workers (commonly paid by the hour) delay work so as to maintain employment on a job until a new building project is available. This may be partially controlled by the employment of supervisors, but such action in itself adds to operating expenses.

Piece Wages. The simplest type of incentive wage plan is the payment of straight piece wages: a specified amount for every unit turned out. Piece wages may be applied to the output of individual workers, or to the output of a group of workers engaged upon various operations in a related project.

The piece-wage plan places directly in the hands of every worker responsibility for his earnings, which he can increase or decrease by varying his productivity. This plan may be a powerful incentive to increase production if it is not subject to abuse by the employer. There is a widespread fear among workers that high earnings secured through speeding up their operations will be followed by a cut in the rate paid for each unit turned out. This fear will destroy the usefulness of the piece-wage system by inducing workers to attempt to maintain existing rates by refusing to increase their productivity. As in all incentive systems, it is important here to make certain that increased productivity is not accompanied by a deterioration of vital quality standards. Incentive plans must usually be set up in such a way that quality is protected by in-

spection, and individual workers are rewarded for maintaining a low level of waste and spoilage of material.

Taylor Differential Rate. A variation of the straight piece wage was developed in the 1880's by F. W. Taylor, often regarded as the father of scientific management in industry. Taylor believed that low wages did not necessarily guarantee low costs of production. He favored penalizing workers with low productivity and rewarding those with high productivity. The basic idea of the Taylor plan was to set two different piece rates for the same operation.

As the result of careful time study of each worker's operations, a standard rate of output was set, which the average worker could be expected to accomplish with a reasonable effort. Workers who did not attain this standard were paid at a specified rate, while workers who exceeded the standard were paid at a higher rate. For example, if one day's standard output for a given operation was set at 150 units, price rates might be set at 3 cents per unit for workers who did not reach the standard and at 5 cents per unit for workers who exceeded the standard output. This plan was designed to offer the strongest incentive to the skilled and ambitious worker. In using such a payment plan, management must assume complete responsibility for maintaining factory conditions and material supply in such a manner that workers are not handicapped by stoppages beyond their control.

While the Taylor Differential Plan in its original form is not widely used today, a number of variations of the plan have been introduced. All accept Taylor's basic principle of special rewards for high productivity, but many are designed to remit some of the harshness of the extremely low rate set for workers who fall below the standard. For a description of these wage systems, the reader is referred to any text on industrial management or compensation systems.

Incentive Wages Appraised. No incentive-wage plan should be regarded as an effective substitute for management supervision. A compensation plan should supplement the efforts of intelligent management; it should not be expected to replace them. Furthermore, whatever the detailed structure of an incentive plan, to be successful it must embody certain essential principles common to all sound payment systems.

A good incentive system should enable employees to share in the benefits of increased productivity. It should be so devised as to be

readily understood by those who work under it, not subject to suspicion of trickery. Premiums or bonuses should cover relatively short work periods (preferably not more than one day), and should be paid at frequent intervals. Workers should not be handicapped by delays or stoppages for which they are not responsible. It has been wisely observed that the success of any compensation plan depends on the intelligence and foresight of the management using the plan.

Profit Sharing. In the effort to ally workers' interests more closely with management's interests, industrial executives have moved beyond incentive wage systems to experiments in profit sharing. In these schemes, workers share in the earnings of business. Profit-sharing plans are designed to accomplish one or more of the following results: (1) interest the worker in reducing waste and costs of operation; (2) maintain a stable group of loyal employees and reduce labor turnover; (3) merge the workers' interests in the larger interests of the business as a whole; (4) ward off labor unrest and union organizing activities.

Employers' interest in profit-sharing plans is likely to be high in periods of prosperity and of labor unrest. Difficulties experienced in trying to maintain such plans through depression periods have led to pronounced dissatisfaction on the part of many managers. Further problems have arisen in attempting to select a suitable basis for the apportionment of profits, since some workers are in a better position than others to make effective contributions to over-all company earnings. A study of profit-sharing plans in industry, undertaken in 1937 by the National Industrial Conference Board, disclosed an unusually high mortality rate among such plans. Only 11 per cent of the plans initiated prior to 1901 were in existence in 1937. The survey did suggest, however, that some of the aims of profit sharing, particularly in reducing labor turnover, had been substantially attained.

An interesting variation of profit sharing achieved popularity during the stock-market boom years of the 1920's. This was employee stock ownership. Many companies devised plans whereby employees could become part owners at attractive purchase prices by the investment of their savings. An estimate of the National Industrial Conference Board in 1927 suggested that in 315 stock-ownership plans as many as 800,000 employees out of a possible total of over 2,700,000 were stockholders, holding shares of

stock valued at more than one billion dollars. In almost every case, employees were aided in purchasing stock by the provision of installment-payment facilities.

Many of these plans were abandoned during the depression years of the 1930's. Employees were shocked by the fall in market values of their securities, and by the loss of part of their savings. A device intended to stimulate loyalty often turned into a boomerang as a result of workers' reaction to deflation of stock values. Some of the plans have continued in successful operation, but many critics of the device have pointed to the undesirable policy of inducing an employee to risk both his salary and his savings in the same enterprise.

SERVICE AND WELFARE ACTIVITIES

It was suggested earlier in this chapter that the financial compensation of wages was neither the total compensation of workers nor their only point of interest in employer-employee relations. Progressive managements sponsor a variety of service and welfare activities for their employees. Many of these activities provide a kind of nonfinancial compensation. From the viewpoint of management they are instrumental in improving health and loyalty among the working force and are expected, in the long run, to make a real, if indirect, contribution to earnings.

Nonfinancial Compensation. Among the more important forms of nonfinancial compensation supplied by many industrial concerns may be listed the following : (1) prevention of industrial accidents; (2) protection of the workers' health; (3) provision of adequate sanitary facilities; (4) educational, recreational, and social activities; (5) provision of housing facilities; (6) encouragement of employee savings plans and mutual benefit associations; (7) contributions to personal security of employees through sickness benefits, group life insurance, pension plans, and action directed toward the prevention and relief of unemployment.

Space is not available for a thorough discussion of these significant types of nonfinancial compensation. For detailed descriptions of plans in each of these areas of service and welfare, and for case studies of actual industrial experiences, the reader is referred to specialized volumes.

Appraisal of Service and Welfare Activities. Some attention should be given to the criticism which has been leveled against

many of these activities. Educational, recreational, and social activities have drawn the sharpest attack. It has been pointed out that the extension of employer participation into so many phases of employees' lives may encourage the establishment of a paternalistic system. Critics often argue that this is the modern counterpart of the medieval relationship of lord and serf. They charge that it weakens the independence of employees and that most workers would prefer the elimination of a large part of the service program, with the funds diverted to a general increase in wages.

There can be little doubt that such a danger exists. In a number of instances employers have resorted to these devices to stave off labor difficulties or impending attempts to organize their workers. On the other hand, many of these welfare and service activities are desirable, and it may be doubted whether employees are in a position to provide them. This is likely to be particularly true in small communities where the bulk of the employment is furnished by a single large enterprise. The most desirable procedure would appear to be the encouragement of employee administration of these activities and the removal, so far as possible, of management's influence.

The Problem of Insecurity. Some of the service and welfare activities listed above strike directly at the crucial problem of insecurity. Security against accident and disease, security for dependents in the event of the wage earner's death, security in old age, security against unemployment — these problems lie at the heart of the worker's thinking. They will continue to be associated with other problems attached to the supply of labor until solutions have been brought forward either by private enterprise or by the government.

Increasingly in recent years employers have been turning their attention to these problems. That few completely adequate solutions have been advanced is rather a challenge to the future than an indictment of the past. Some beginnings have been made by private concerns, and the programs have been immeasurably strengthened by the Federal Social Security Act which established, on a modest scale, pensions for retired workers.

Perhaps the most striking problems lie in the alleviation and cure of the disease of unemployment. This may be embedded so deeply in the private-enterprise system that it can never be completely abolished. But the action of a small number of American employ-

ers in undertaking to guarantee to many of their workers continuous employment for a minimum number of weeks during each year presents a challenge to business to deal with its most persistent and tragic ailment.

Perhaps the best known of the plans for guaranteed employment is that undertaken by the Proctor & Gamble Company:

> The employment guarantee applies to all employees, both in factories and district offices, whose wages or salaries are less than $2,000 a year and who have been with the company 6 months or longer, provided they enroll themselves in the profit-sharing plan. Such employees are guaranteed 48 weeks' work a year at full pay, less only time lost by reason of the customary holiday closings or through fire, flood, strike, or other extreme emergency. Employees may be transferred from one job to another to keep them at work and under such circumstances are paid their regular hourly wage rate. A record is kept of the amount of time lost by each employee because of the inability of the company to provide work and when such lost time exceeds 200 hours, representing the 4 weeks not covered by the guarantee, payment is made at the regular rate provided the employee reports for work.[1]

The path to widespread acceptance of these principles is long and difficult. For many companies, the financial burdens to be assumed in connection with such guarantees of employment in seasonal industries are overwhelming and the administrative problems complex in the extreme. It is possible that the problem is beyond the abilities of the major part of American industry. But until some solution has been reached we cannot claim for our economy the achievement of universal well-being.

DEFINITIONS

Cost of subsistence theory. An explanation of wage levels which argues that in the long run workers are paid an "existence" wage, enough to maintain them and their families.

Labor reserve. The group of unemployed ready and willing to undertake jobs in industry. It is from this group that workers are recruited in a period of expanding development.

Productivity theory. An explanation of wage levels which argues that in the long run wages of workers are determined by the value of the services they render.

Real wages. The amount of goods and services workers can buy with their money wages. The value of money wages is affected by changes in the general price level.

Technological unemployment. Unemployment resulting from the replacement of workers by machines.

[1] National Industrial Conference Board, *Unemployment Benefits and Insurance*, New York, 1931, p. 101.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What one characteristic distinguishes labor power from raw materials and machines?
2. In the past 50 years what has been the effect of our industrial development upon the proportion of the working population engaged in agriculture, in trade, in transportation, in communication, in manufacturing, and in the various professions?
3. Do large or small firms employ the greatest amount of capital and labor today?
4. When did the volume of unemployment in the United States reach its peak? What is generally considered a fair estimate of the amount of unemployment at that time?
5. Why do maladjustments of supply and demand occur and cause unemployment? Why can't workers readily adjust themselves by transferring from one industry to another or from one section of the country to another?
6. How do technological developments cause displacement of workers and promote unemployment?
7. What is personnel administration?
8. Why are companies increasingly cautious about whom they hire?
9. What are the two chief techniques of interviewing and what is the purpose of each?
10. Why is the apprenticeship system of training less important than formerly?
11. Name some of the sources (in addition to wages) from which labor disputes originate.
12. What are the advantages of the piece wage-plan? Of the Taylor differential rate?
13. Name some of the essentials of a good incentive-wage system.
14. How does employee stock ownership work? What is one of its undesirable features?
15. What is the danger of a vast extension of service and welfare activities?

B

1. Has the growth of the volume of employment in the United States kept pace with the growth in the total available supply of labor power? Why?
2. In the long run was American labor benefited or harmed by the influx of immigrant workers, whose fierce competition forced the wage scale down?
3. Does the increase in the proportion of gainfully employed people who work for others increase or decrease the social responsibilities of the employers? Explain.
4. Does a gasoline station meet the test of a legitimate economic activity by satisfying a consumer demand? Is it primarily a distributor of goods or services? Is this arrangement an efficient manner in which to employ laborers?
5. Why are there still many more small firms than large ones? In what economic areas are the small firms located?

6. Why is it difficult to calculate the number of unemployed?
7. Is not mobility of labor necessary if supply and demand are to be allowed free reign in determining economic decisions? If mobility of labor is impossible, what happens to established theories about the necessity of maintaining competition and supply and demand as the sole determiners of economic decisions?
8. In 1930 many trade-union leaders, fearful of too much competition in the market for skilled laborers, advocated an abandonment of the apprenticeship system. In light of the current shortage of skilled craftsmen, does this indicate a lack of foresight on the part of trade-union leaders? Did they act wisely from a social point of view? Did they act wisely from a purely selfish point of view?
9. Are business men in any sense being altruistic by sponsoring the various kinds of training schools?
10. Has the removal of employers from frequent close contact with their employees made executive-training programs increasingly important in maintaining desirable labor conditions? Explain fully.
11. What are real wages? What bearing do they have on the problem of remuneration for laborers?
12. Does the bargaining theory disclose a healthy kind of determination of wage levels? What is wrong with it?
13. We are told that commodity prices should be determined by free interplay of the forces of supply and demand. Is this not also true of the price of labor, that is, wages?
14. Can we condemn employers for entering into price-fixing agreements and at the same time approve the entry of employees into wage-fixing agreements through labor unions? Both are certainly interferences with the interplay of supply and demand. Is either one desirable?
15. In what fields and under what conditions is it wise to pay wages on a time basis?
16. What is the long-term result of an employee's ignoring his responsibility to the company paying him on a time basis by deliberately slowing operations in order to stretch out the work?
17. Employees paid on a piece basis often fear that the speed-up in the number of units produced will result in the employer's lowering the rate paid for each unit. Is the employer who follows this policy acting wisely from his own point of view? From the point of view of society?
18. In the long run are the interests of employers and employees contrary? Explain.
19. Evaluate the following paragraph. A wise employer will follow a policy of sharing profits with his employees. Profit sharing is a device which makes it clear to the worker that the success of the company is, in the long run, his success. It teaches him that to act in the best interests of the company is to act in his own best interests. Generally, it is a device which may get to the heart of many of our pressing labor problems.
20. How far do employers' responsibilities to their employees extend? How paternalistic have they a duty to be?

C

1. In 1937 the government conducted a census, by mail, of the number of unemployed persons in the United States. Using your knowledge of statistics and field research, write a short paper telling what standards you would employ to judge the accuracy of such a census and what methods you would use in conducting such a census of your own.
2. Make a report on the training programs and methods of some industrial concern from which you can readily obtain the necessary information.
3. Indicate on an outline map of the United States the distribution of population in rural and urban centers in 1900. Repeat the process for 1930. Compare the results.
4. Using the same industry from which you obtained information in question 2, report on the kind of wage plan used, the profit-sharing arrangement, if any, and the forms of nonfinancial compensation for employees.
5. What provisions are made by national legislation for making workers more secure? Conduct a similar research into the appropriate statutes of your state.

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CHAPTER 16

LABOR ORGANIZATION AND COLLECTIVE BARGAINING

Problems of labor relations resolve themselves, sooner or later, into the questions of labor organization and collective bargaining. These problems should not be examined solely in terms of newspaper headlines over stories of industrial disputes. Nor should they be regarded solely as economic disagreements between capital and labor, employers and employees. They are economic disagreements, to be sure, but they are also social problems of the deepest significance.

If we are to understand the position of labor in our society, we must attempt to come to grips with these problems on both the economic and the social levels. We must discover why labor organizes. We must learn the full measure of labor's stake in industry. And we must find out something about the function and the technique of collective bargaining in the American industrial system. This chapter will be devoted to a discussion of these questions.

THE FOUNDATION OF ORGANIZATION

Let us begin by trying to set down the reasons why there is a general disposition on the part of most thinking workers to favor some type of labor organization. The most important reason lies at the heart of the bargaining process which settles the terms of employment. The individual sells his labor power by agreeing to work for an employer at a specified wage. Theoretically, workers compete among themselves for jobs, and employers compete among themselves for workers. Each employer and each employee looks after his own best interest. As a result of competition between equals, this should result in every worker selling his labor power for the highest possible wage. If one employer offers less than others, he will be unable to find men willing to work for him. Conversely, no worker will take less than the going wage for his type of work.

Why Labor Organizes. To anyone who studies the history of employment terms, it is obvious that practice does not follow theory. The worker's bargaining power is not equal to the employer's bargaining power. The worker is handicapped by his relative immobility. A worker is not free to move his family from one part of the country to another in search of higher wages. A family tends to take root in a community (geographical immobility). A worker cannot transfer readily from one trade to another (occupational immobility). A worker without a reserve of savings is dependent upon the income from daily employment and does not dare assume the risk of unemployment which is attached to any attempt to move to another community. Even when he is prepared to assume the risk, his position often prevents his learning about other opportunities.

The individual worker's theoretical freedom and equality in the bargaining process are severely limited in practice. He is usually compelled to accept whatever employment is offered, nor is he in a position to bargain over either wages or conditions of employment. Rarely does he own the tools with which he works. He cannot be his own employer. The conditions of employment are almost never settled as the result of a bargain between equals. It is in the effort to strengthen his side of the bargaining process that the worker joins in organizing efforts. Workers as a group have a bargaining strength that individual workers can never achieve. The union is stronger because it represents a group; it is stronger because it does not expose any individual to the threat of discharge; and it is stronger because it permits a skilled negotiator to bargain for the group.

There are other reasons for labor organization. Through its solidarity, the organization reduces or eliminates competition between workers which depresses both wage levels and working conditions. Frequently, unions offer other benefits to their members: social and educational facilities, sickness and death benefits, and unemployment benefits. In many trades in which labor organizations have been solidly entrenched, membership in the union is necessary to get a job. In addition to their function as collective bargaining agents, and their educational and social benefits, unions are active in working for legislation favorable to their members.

The background for labor organization, it is clear, is a combi-

nation of factors: economic, social, fraternal, and political. This does not imply that all workers have organized, should organize, or even maintain a favorable attitude toward labor organization in general. Nor does it suggest that all unions perform these services for their members. It is simply a statement in broad terms of the reason for the general development of labor organization.

Why Some Workers Do not Organize. When we survey the advantages of organization, we cannot escape becoming curious about the fact that a relatively small proportion of the working population in the United States is affiliated with unions. Why don't more workers organize? There are several reasons for this failure to extend organization.

First, until 1933 organization activity was confined largely to the small group of highly skilled workers. Little or no attempt was made to organize the unskilled and the semiskilled of the great mass-production industries.

Second, a similar lack of interest was evidenced in organizing certain other groups of workers, regardless of their skill. Women, children, and the great body of Negro workers are included in these groups.

Third, millions of "white-collar" workers, employed in stores and offices, have until recently been strongly opposed to organization because they have regarded unions as essentially organizations for factory workers, construction workers, and railroad workers. Although often paid at a lower rate than workers in these groups, white-collar workers have preferred to identify themselves with the interests of employers.

Fourth, the absence of a common national background for the mass of American workers, drawn from every section of Europe, has spread distrust and unwillingness to cooperate.

Fifth, widespread opposition to labor organization on the part of many employers has persuaded workers of the hazards of union activity. In many instances prior to 1933, leaders in organization efforts lost their jobs and employees contemplating affiliation with existing organizations had to consider the possibility of discharge as a factor in reaching a decision.

The Power of Organized Labor. It is clear that powerful forces have been at work opposing the spread of labor organization. These forces explain why the group of unorganized workers still outnumbers the organized body in the proportion of 6 or 7 to 1.

But the effectiveness of labor organization is not measured by the number of affiliated workers. Organized labor speaks with a powerful and concentrated voice. The economic and political power and the social significance of organized labor have far exceeded its numerical strength in the whole group of American workers.

If we are to understand the social setting of labor organization and collective bargaining, we must pause to look at the history of labor organization in the United States. No attempt will be made in this limited space to trace the entire course of union history. But a grasp of the forces active in the growth of labor organization in this country is essential for an intelligent appraisal of the position of unions today and of the significant issues in collective bargaining.

HISTORY OF LABOR ORGANIZATION TO 1933

The first attempts to organize American workers in unions can be traced as far back as 1792 with the organization of the shoemakers of Philadelphia. Printers were organized soon after this date. During the first 20 years of the nineteenth century there were unions of printers and shoemakers in most of the larger cities. From their earliest years, the unions were active in fighting for higher wages and a shorter working day.

In the second quarter of the nineteenth century labor organization spread to other trades. Hatmakers, cabinetmakers, tailors, and carpenters organized and sponsored a series of strikes in the effort to reduce the basic working day to 10 hours. Unions were also interested in securing political reforms in the interests of the working classes. They favored the removal of property qualifications in several states, which often prevented workers from voting, and they fought the practice of imprisoning a man for failure to pay his debts.

Throughout this period, union organization was weakened in periods of depression and carried forward in periods of prosperity. Until the 1850's, however, unions continued to be little more than local organizations of skilled craftsmen; national organizations had never been permanently established. After 1850, the local unions in each trade began to establish national affiliations with increasing success. At the same time, a widespread movement was initiated on behalf of the eight-hour day.

The Knights of Labor. The first major effort to unite all workers, regardless of craft, race, or sex, occurred in 1878 with the national organization of the Knights of Labor. This organization granted memberships to both local and national craft unions. The Knights of Labor attained its greatest membership in the mid-eighties. It experienced a rapid decline in the next five years, and by 1893 it was no longer of any significance among workingmen.

The experience of the Knights of Labor had a profound influence on the union movement. It was the first large-scale organization granting admittance to all workers regardless of craft affiliations. It gave a convincing demonstration of the possibility of joining in a single organization all types of workers, skilled and unskilled. It portrayed to many workers for the first time the economic and political strength of labor solidarity.

The American Federation of Labor. While the Knights of Labor was expanding in the 1870's, there appeared a new type of trade union, illustrated by the organization of the cigarmakers. The early American unions had been loosely tied organizations, with leaders who devoted much of their time to the consideration of revolutionary or reformist ends. The cigarmakers reorganized along the lines of British trade unions of the period, with centralized authority in the hands of a few national officers, high dues to build substantial reserve funds, and a system of social benefits to win and hold the loyalty of the members. The new unionism concentrated on day-to-day problems and drove hard for immediate wage benefits for its members. The Knights of Labor and similar organizations had taken an idealistic long-range view of the worker's position in society, hoping to improve his lot by a gradual change in the social structure. The new unionism adopted direct and immediate benefits, for members only, as its guiding policy.

This directing principle, often referred to as "business unionism," was adopted by other national craft unions in the 1880's. There were at this time about 30 crafts organized nationally, including the printers, the hatmakers, the molders, the locomotive engineers, the cigarmakers, the iron and steel workers, the bottle-blowers, the carpenters, the tailors, and others.

In the effort to unite their scattered interests, in 1881 these national trade unions formed the Federation of Organized Trades and Labor Unions. For the next five years the new Federation and the Knights of Labor engaged in a struggle over purposes. The

interest of the Knights of Labor continued in the support of legislation to benefit all members of the working class; the interest of the new Federation centered in the immediate institution of the eight-hour day. By 1886 it was apparent that the divergent principles of the two organizations could not be reconciled. The Federation reorganized on a permanent basis as the American Federation of Labor.

In the new organization, the basic supporting units were the national craft unions. Local union organizations had relations with the central offices only through the national craft unions with which they were affiliated. The income of the federation was secured by a tax levied on every member of the affiliated unions.

In the decades which followed, the American Federation of Labor continued along the path clearly outlined at the time of its foundation. It encouraged the organization of workers by crafts. It maintained only a slight interest in semiskilled and unskilled workers. It advanced by every possible means the interests of its members in terms of hours, wages, and conditions of employment. Throughout this period until 1922 the power of the unions increased in prosperous years and declined in years of depression. Between 1923 and 1929, however, union membership declined sharply in mining, oil production, clothing manufacture, and shipbuilding. Approximately 17 per cent of all workers were organized in 1920. By 1930, only 9 per cent were organized. Contributing to this decline in union membership were the antiunion policies of many powerful employers, depression and industrial location shifts in the important coal, textile, and shoe industries, and a growing dissatisfaction with the effectiveness of the craft type of organization in mass-production industries.

The unprecedentedly severe depression between 1929 and 1933 struck labor a harder blow than any other depression in our history. In this period total wages paid by all industries declined 55 per cent. In the steel industry the wage bill declined 64 per cent. The fall was even greater in machinery manufacturing, the production of stone and glass products, and in the manufacture of transportation equipment. This decline reflected the combination of widespread unemployment, part-time employment, and wage cuts.

The impact of the depression is shown even more clearly by the decline in average weekly earnings of employed workers. In 1929

average weekly earnings of wage earners in 25 manufacturing industries were $28.55. In 1933, they had dropped to $17.71.

Union membership, already weakened during the 1920's, was reduced even further. The unemployed and the partially employed could not pay their union dues. It was useless to resort to strikes in the attempt to bolster falling wage rates, because of the army of the unemployed waiting to seize all strikers' jobs. Unions affiliated with the American Federation of Labor claimed a membership of over 2.7 million in 1929. By 1933, the figure had declined to 2.3 millions.

LABOR ORGANIZATION UNDER THE NEW DEAL

A new stage in the history of union organization was inaugurated in 1933 following the passage of the National Industrial Recovery Act. Under this Act, employers were encouraged to set up codes of fair competition, industry by industry. Labor was given a voice in the framing of these codes and labor leaders seized the opportunity to incorporate in many of the codes aims for which they had long been fighting, particularly in the establishment of provisions governing minimum wages and maximum weekly hours of employment.

Of even greater importance for the cause of union organization was Section 7 (a) of the National Industrial Recovery Act, which stated that

> employees shall have the right to organize and bargain collectively through representatives of their own choosing, and shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activity for the purpose of collective bargaining or other mutual aid or protection.

This was hailed by the unions as the Magna Charta of organization freedom and a guarantee of the right of collective bargaining.

Under its encouragement, organization campaigns were undertaken in industries in which some workers already had been organized, as well as in industries and trades which had never known organization. The rolls of the older unions were swelled with new recruits. In 1932 the International Ladies Garment Workers' Union had 40,000 members; by 1935 it reported a membership of 160,000. The United Textile Workers reported a membership of 27,500 in 1932 and an increase to 79,200 in 1935. The United Mine Workers increased its membership from an

estimated 60,000 in 1932 to more than 400,000 three years later. The greatest gains were reported, not by the old established craft unions, but by the newer industrial unions which included in a single organization workers in all phases of an industry, striking across craft lines of demarcation which previously had been ealously guarded.

As might have been expected, the sudden increase in union membership brought about by the organization of workers with little or no experience in union cooperation and the techniques of collective bargaining was followed by a rash of industrial disturbances across the face of America. The difficulties were multiplied because of the refusal of many employers to recognize the new unions as collective bargaining representatives for their employees, and by the inexperience of other employers in negotiating with unions.

The Wagner Act. The Supreme Court declared the National Industrial Recovery Act unconstitutional in May, 1935. This did not remove the stimulus to organize and bargain collectively, for within two months Congress passed the Wagner Act providing for the establishment of the National Labor Relations Board. Among other duties the Board was directed to prohibit employers from interfering with the attempts of their workers to organize and bargain collectively. The Board was also authorized to conduct elections among workers in any plant to help them designate their choice of organization to represent them in collective bargaining with their employer.

The Committee for Industrial Organization. Legislative encouragement and the protection of organization activities, the spread of unionism into the new mass-production industries, and the dominant position in the American Federation of Labor of the old craft unions of skilled workers all contributed to the growth of dissension within the ranks of organized labor. The charge was raised that adherence to the principles of craft unionism was delaying the organization of millions of workers in the mass-production industries. It was argued that the modern industrial system called for industrial unions each of which would take in workers in every division of an industry, making no distinction by crafts or trades. It was also charged that the craft unions of skilled workers had little interest in organizing the semiskilled and the unskilled.

The ranks of the craft unionists were headed by William Green,

president of the American Federation of Labor. Those who favored opening organization campaigns in mass-production industries along the new lines were headed by Charles Howard, president of the International Typographical Union, and John L. Lewis, president of the United Mine Workers. Unsuccessful in forcing a change in the policies of the leaders of the American Federation of Labor, the industrial union supporters met separately in November, 1935, and established the Committee for Industrial Organization (popularly referred to as the "C.I.O."). Powerful unions gave their support to the new organization: the United Mine Workers, the Amalgamated Clothing Workers, the International Ladies' Garment Workers, the International Typographical Union, the Hatters, Cap, and Millinery Workers, the Mine, Mill, and Smelter Workers, and the Oil Field, Gas Well, and Refinery Workers.

Officials of the A.F.L. continued to support craft organization, refused to grant an industrial union charter for radio workers, and encouraged craft organization of the mass-production automobile workers. The split between the two groups widened after the disagreement over craft versus industrial organization of the steel workers, with the C.I.O. division giving its financial support to an industrial-organization campaign. In September, 1936, the craft group in the Executive Council of the A.F.L. voted to suspend the C.I.O. unions. The suspension vote split organized labor into two camps, with the A.F.L. claiming a membership, through affiliated unions, of 3.4 millions and the C.I.O. claiming a membership, in 10 suspended unions, of approximately 1.1 millions.

A.F.L. versus C.I.O. Since 1936 relations between the two divisions of organized labor have been marked by a bitterness which has denied any compromise or resolution of differences. The C.I.O., which changed its full title to Congress of Industrial Organizations, pushed actively into the task of organizing workers in the mass-production industries: steel, automobiles, textiles, rubber, radio, communications, and packing. By the end of 1938, the C.I.O. claimed a larger membership than the A.F.L. All membership claims were subject to debate, however, and there were counter accusations of inflating membership figures.

In the extractive industries the C.I.O. won a dominant position, based on its strongest union, the United Mine Workers. In the basic manufacturing fields, the C.I.O. secured a substantial nu-

merical superiority over the A.F.L., including in its controlled groups the men's clothing workers, textile workers, rubber workers, steel workers, radio and electrical workers, automobile workers, and flat-glass workers. The A.F.L. remained dominant in the organizations of craft workers in the metal and machinery industries. It also retained the support of craft workers in the glass industry. The A.F.L. continued in sole control of the 16 craft unions in the construction industry. The C.I.O. has been more active in organizing white-collar unions of clerical and professional workers, while the A.F.L. has retained the allegiance of workers in the personal-service industries, including barbers and hotel and restaurant workers.

The question of craft versus industrial unionism has been debated at such length that the major issues have been brought clearly into the open. The supporter of the craft type of organization calls attention to the stability of the craft union, founded on a community of interests, skills, and training. Members work together and have a pride in the record of their continuous organization. Craft unions have contributed major benefits to their members. Finally, joint action of all craft unions can be secured through the A.F.L. without sacrificing the individuality of the separate unions.

On the other hand the supporter of the industrial union points out that mass-production industry presents for unionism a wholly new business background, one to which the industrial union is much better adapted than is the craft union. The technique of the assembly line and the power-driven machine have decreased the number and significance of skilled workers. The class of machine tenders has neither the apprentice background nor the specialist's skill which builds a pride in the performance of a single craft. Furthermore, all employees in the mass-production industries are bound together by the continuous process of materials on which they work. The industrial union, representing all the workers, can bargain with the management more effectively than can the array of craft unions. Indeed, from the employer's viewpoint, the industrial union simplifies the collective-bargaining process, reducing a series of separate negotiations to a single company contract covering all workers.

Discussion of craft-industrial differences makes it clear that the craft opposition to the industrial union is founded, to an appreciable extent, on the skilled workers' distrust of the unskilled

workers. The admission to a single union of skilled and unskilled workers will break down the established power of the skilled craft workers. They fear for their prestige. Their leaders fear that they must share control over union affairs. There is also a widespread belief that many of the leaders of the new industrial unions have radical economic philosophies. Thus, there are intermingled political, economic, and psychological motives so deep-grained that the working out of an acceptable pattern for joint action, or effective compromise, presents many difficulties.

THE EMPLOYER AND ORGANIZED LABOR

There are at least three sharply contrasting employer attitudes toward organized labor. First, there is a large group of employers who are bitterly opposed to all forms of labor organization. Their opposition is deep-rooted and fundamental. They regard union organizers as dangerous radicals who propose to overthrow the established free-enterprise system. They look upon unions as an economic menace, gouging workers on one hand through exorbitant dues used to support a small group of officials, and gouging owners on the other through their demand for higher wages and shorter hours. The only outcome of union activity, as this group of employers sees it, is increased operating costs. They are opposed, also, to such union practices as the application of seniority rights,[1] the establishment of the closed shop,[2] jurisdictional disputes between craft unions,[3] and apprentice regulations.[4] Above all, they resent any infringement by organized labor's representatives on their right as employers to absolute freedom in the administration of their business.

There is a second group of employers whose attitude toward labor organization is by no means so hostile as that of the group described above. Employers in this group neither oppose nor

[1] The practice of compelling an employer to consider length of employment as the first criterion in promoting or discharging workers. The worker with the longest service record, regardless of ability, is first in line for promotion, and last in line for discharge in times of slack business.

[2] In a closed shop the employer can hire only union members. A worker who is not a union member cannot be employed, regardless of his ability.

[3] Arguments between craft unions about the right to do a certain type of work. Construction projects are often delayed for considerable periods because two craft unions cannot agree which should have jurisdiction over a particular job.

[4] Apprentice regulations govern the number of learners to be admitted annually to a union and the period during which a worker is classed as an apprentice.

favor unions. Often, they are men with an innate sympathy for the organization of labor, but a fear of the power of the union. To some extent, this fear may be traced to ignorance of union aims or of the technique of collective bargaining. To some extent, without doubt, it is a result of unreasonable union demands in situations which have been given wide publicity through the newspapers. To some extent, it is probably due to pressure extended by a more powerful business man with pronounced antiunion views.

There is a third group of employers who openly state that they welcome the organization of their employees because they prefer to bargain collectively rather than individually, and because they prefer to keep their labor relations on a businesslike contractual basis. The employers in this group are likely to be men who have had a minimum of unpleasant experiences in dealing with unions. They are likely to be men whose employees are members of a union under intelligent responsible administration.

The Weapons of Antiunionism. Employers' opposition to labor organization has taken many forms. Perhaps the one most frequently used in the past has been simply the policy of refusing to hire a union member and of discharging any employee who joined a union. In many instances employers maintained a staff of informers who reported on the union status of employees and applicants for employment. The use of nonmembership in a union as a condition of employment became illegal in 1937, following the Supreme Court's decisions supporting the constitutionality of the National Labor Relations Act. Even now, however, an employer is free to give preferential treatment to a nonunion employee.

A second policy of opposition is often referred to by the single word "paternalism." There is little doubt that many employers have provided elaborate social and recreational facilities for their workers with the thought that they were aiding to create a situation unfavorable to union organization.

A third weapon of antiunionism is the "black list." This term was first applied to a list of the names of known or suspected union members, which was circulated among employers. This was an effective device to keep union members out of employment. In recent years, it has been charged that employers' associations in many industrial areas have maintained central files of union members or organizers. When a worker applies for a job in one

of these areas, his name is checked at the central office for the comments of other employers.

A fourth weapon of antiunionism has become known as the "yellow-dog contract." This is an agreement between employee and employer in which, in exchange for a job, the employee agrees not to join a union or engage in union activities.[1]

A fifth weapon of antiunionism has already been referred to: it is the erection of a widespread system of industrial espionage. Congressional investigations have disclosed a long list of companies which at one time or another have employed spies to prevent union organization, report workers interested in organization of workers, and in other ways to disrupt existing unions or prevent the organization of new unions. Among the methods employed have been the use of rumor to destroy the reputation of union leaders and to spread fear. Where other devices have failed, it has often been possible for spies to get themselves elected to important union offices and then to sabotage attempts to strengthen the union or to move effectively for higher wages or improved working conditions.

The Company Union. The company union is related to these weapons of antiunionism, although it should be pointed out that not all company unions have been organized with this end in view. "Company union" is the term applied to organizations of workers in a single company. Such other titles as "employee-representation plans," "works councils," or "cooperative associations" are sometimes used. Whatever the title, the important characteristic of this type of organization is the fact that none but employees of one company may join.

Company unions were rather widely used during the 1920's, particularly in the larger establishments. They declined in number during the depression years of 1930–1933, but were organized very rapidly in the two following years. In 1935, it was estimated that as many as 2.5 million workers were affiliated with company unions. The Supreme Court's support of the constitutionality of the National Labor Relations Act, in 1937, halted this growth, for the Act placed legal restrictions about employers' domination of company unions.

Most company unions have been organized directly by employers or indirectly following their suggestion. The effectiveness of such

[1] The Norris-La Guardia Act, the National Industrial Recovery Act, the National Labor Relations Act, and a number of state laws have barred yellow-dog contracts.

unions as a device for keeping outside unions from organizing the workers is marked by the fact that in one way or another the employer dominates or influences the company union. Management often assumes all financing for the union. It often supplies office space and stenographic assistance. In the company union the workers' representatives must deal with their own superiors. Workers are cut off from contact with experienced independent leadership. It is little wonder that many employers have found in the company union a useful device for avoiding the appearance of antiunionism while at the same time directing workers' organization and sifting all dangerous movements. Not all employers have used the company union in this way, but the practice has been so widespread as to associate the name in the minds of most workers with other antiunion weapons.

INDUSTRIAL DISTURBANCES

The basic aim of organized labor is control of the price which workers are paid for their labor power. Allied to control of wages — or to a strong position in bargaining about wages — is control over hours of labor, conditions of employment, the right to hire and discharge; control, also, over the rate of output demanded from labor, and over the introduction of machinery. In general terms, it is the objective of organized labor to eliminate competition between workers and thereby to build for union members a strong bargaining position.

To convert these aims into accomplishments, organized labor strives for union recognition. This involves the consent of the employer to accept the officers of the union as spokesmen for all union members, and to negotiate with them all questions of wages, hours of work, and other conditions of employment. To strengthen its bargaining position, organized labor attempts to secure the employer's agreement to a closed shop. To protect its members from discrimination, organized labor seeks to hedge the employer's right to discharge by establishing the seniority principle.

Of all the aims of organized labor, the most important aim, the one most often at the focus of industrial disputes, is the maintenance and the advancement of wages. Along with the attempt to increase employees' income goes the movement for the shorter working day. This was formerly sought as a means of increasing workers' leisure time. In the past decade, with its overhanging threat of a labor

surplus, the shorter working day and week have been supported as a cure for unemployment by spreading work.

The Tactics of Organized Labor. Progress toward these objectives necessarily brings labor into conflict with management. For the attainment of labor's aims means, in most cases, increased costs of operation. The dispute may begin with discussion, and it may be resolved by mediation or arbitration. But the underlying strength of organized labor, demonstrated or implied, is the strike. Organized labor's most effective weapon in its disputes with employers is its ability to refuse to work.

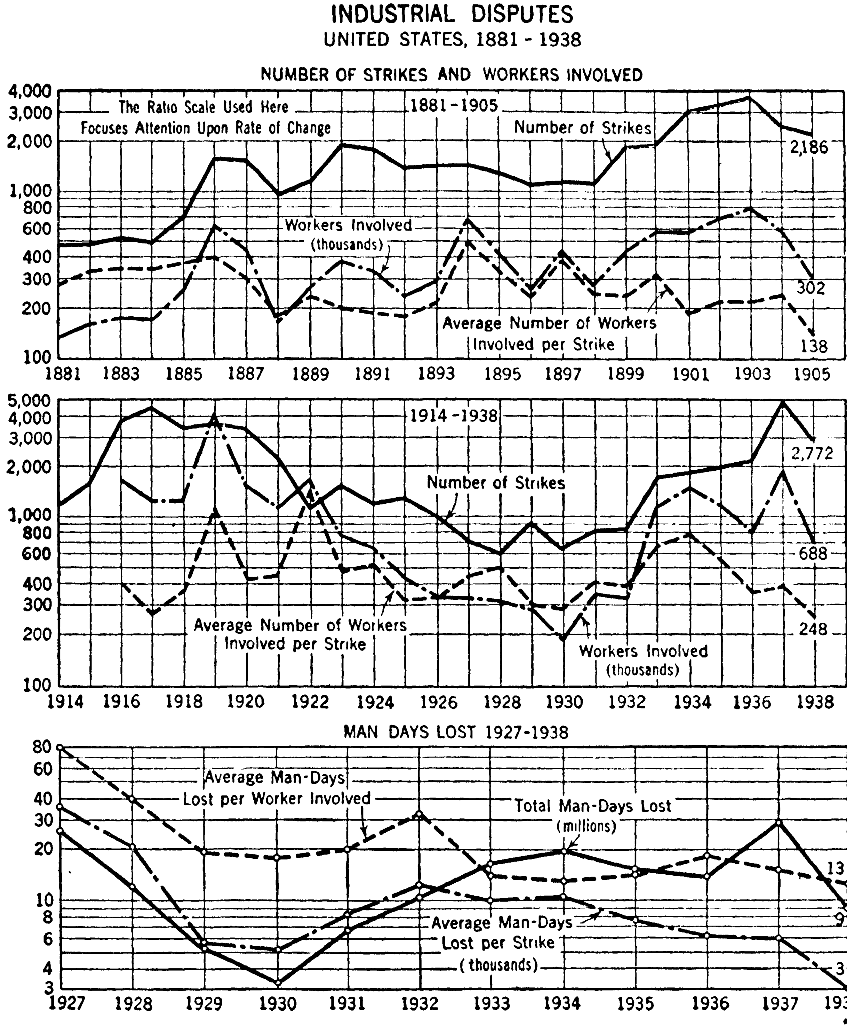
A strike is an organized work stoppage. Strikers continue to look upon the jobs in the plant as their jobs. They hate and oppose workers who come into the plant to take strikers' jobs. Upon such men they pin the contemptuous label, "scab."

The tactics of the strike call for the workers to refrain from labor until the employer is forced to grant their demands (or reach a reasonable compromise), because he can no longer endure the financial losses piled up by a closed plant. Bitter feeling mounts in the tense atmosphere of a strike, however, and it may be fought through by employer, or by employees, with a stubborn refusal to compromise even when a rational examination of the financial gains and losses would suggest a settlement of differences and a return to work.

Strikes may be carefully planned by union leaders. Often they are carried through with a high level of discipline. But there are also spontaneous strikes which suddenly flare up out of relatively trivial arguments. The history of organized labor suggests the observation that the mature and established unions can often settle disputes by compromise or arbitration with employers who are similarly experienced in the technique of collective bargaining. It is the young union, with members inexperienced in organization — and, it must be added, the hostile employer, or the employer inexperienced in collective bargaining — which is apt to plunge into a strike.

Strikes. Statistics on strikes are notoriously scanty and misleading. We know that strikes are more likely to occur during periods of prosperity and periods of slight recession in business activity than during other stages of the business cycle. In years of very active business, mounting living costs and the rise in business profits induce workers to demand wage increases to maintain their

CHART 25



SOURCE: National Industrial Conference Board, *Conference Board Studies in Enterprise and Social Progress*, New York, 1939, facing p. 238.

living standards and share the increased profitability of business. In a period of business recession employers seek to initiate wage reductions in order to reduce costs of operation. Employee opposition to wage cuts may lead to work stoppages. Strikes seldom occur during years of deep business depression when there are large numbers of unemployed and the worker with a job fears the risk of losing it as the result of an unsuccessful strike.

One of the major difficulties encountered in trying to assemble strike statistics is the fact that the important point is not the number of strikes, but the number of strikers. And we are interested not only in the number of strikers, but also in the number of working days lost as a result of strikes. For convenience of measurement, therefore, it has become common to calculate the effect of strikes in terms of the number of man-days of work lost, that is, the product of the number of workers involved in a strike multiplied by the number of days the strike lasted.

Using this basis of measurement, the United States Bureau of Labor Statistics has estimated the extent of strikes as involving more than 26 million man-days in 1927, falling to 6.8 million man-days in 1931, and rising to 19.5 million man-days in 1934, and to 28.4 million man-days in 1937.

Strike Tactics. Strikes may result from any of the points at which employer and employee interests come into conflict. They may be traced to disagreements about wages and hours of employment or about questions of union organization and recognition; they may also be traced to rivalry between unions, or to union organization campaigns. It should be observed that it is often difficult to discover the real point at issue in a strike. There may be several issues rather than one. And, for strategic purposes, one issue may be widely advertised as the cause of the strike when, in reality, another and wholly different point is the true source of the dispute.

From labor's viewpoint, the effectiveness of the strike as a weapon in industrial disagreements depends upon its ability to injure the employer financially. This ability is limited by the effect of the strike on those workers directly involved. For they, too, undergo a financial sacrifice during the strike, and they are usually not so well prepared in terms of reserves of savings. Time wears down both opponents in every strike. In strikes which endure more than a few days, unions with strong reserves usually pay strike benefits to workers and help to feed and clothe their families.

At least as important as financial support to the strikers, however, is the maintenance of their unity and their willingness to continue the struggle. In any strike of long duration there is an inevitable weakening of morale. Some lose hope and suggest returning to work. Since any break in the common front will

sap the strength of the strikers, campaign speeches, mass meetings, songs, and rallies must be utilized to keep spirits high and maintain morale.

Both sides seek public support by a statement of their differing interpretations of the issues at stake. Both sides try to maintain a strong bargaining position by asking for more than they are willing to grant or accept. The settlement of a strike usually involves a compromise of major points of difference with a provision for "face-saving" for the side which appears to make an important concession.

In recent years special types of strikes have appeared. One of the most spectacular was the sit-down strike which secured wide publicity in 1937, although it had been employed in previous years. In the ordinary strike workers leave the plant and maintain a picket line outside the company's property to prevent strikebreakers from entering the plant and to inform the public that a strike is taking place. In the sit-down strike workers remain within the plant, but do not perform any work. They simply occupy the property, with supplies sent in so that they can eat and sleep. The sit-down strike has the advantage, for the workers, of more effective prevention of the use of strikebreakers, and, because all the striking workers are kept in a group, it is usually easier to maintain the spirits of the individual workers.

Those who attack the sit-down strike commonly charge that it amounts to a confiscation of property and therefore is clearly illegal. But most sit-down strikes have been conducted in a relatively orderly fashion and few evictions by force have been undertaken.

Occasionally workers go on strike not because of any grievance of their own, but as a gesture of aid to other workers who are striking with a real grievance. This is often described as a "sympathetic strike." It may be either simply a gesture of moral support or a real addition of economic strength. A sympathetic strike may be of real assistance when it takes place in the same industry as the original strike. Thus a strike of teamsters and truck drivers may be very effective in supporting a strike of longshoremen, by tying up all transportation facilities in the area. A sympathetic strike of electricians or bricklayers may be very effective in enforcing the demands of striking carpenters, in this case by tying up a series of construction jobs.

Sympathy may be expressed by refusal of the members of one union to handle materials processed by other workers currently on strike. Members of a union may also refuse to handle materials made by nonunion labor. Thus, pressmen may refuse to handle paper manufactured by nonunion labor. This type of sympathetic strike exerts pressure not so much against the employer of labor as against his customers.

Extended throughout the ranks of labor, the sympathetic strike becomes a "general strike." This is the term applied to a strike of all workers in a community or an industrial area. The general strike creates a paralysis of economic activity. The United States has never experienced a complete general strike, although in several instances sympathetic strikes have been so widespread as to bring economic activity temporarily almost to a halt. In 1935, such a situation occurred in San Francisco as a result of the struggle between the shipping companies and the maritime workers.

The threat of a general strike is probably the most powerful weapon possessed by organized labor. Yet it is a weapon so dangerous to those who use it that it is almost never employed. The general strike will bring so much public inconvenience or even danger, in the case of disruption of the essential services in any community, that the entire community may rise to fight the strike. In this situation the workers will lose their case before the tribunal of public opinion before they have an opportunity to debate it with their employers.

Resolving and Preventing Strikes. The common end of strikes is a working compromise of points at issue. Occasionally one side or the other secures a complete victory, but this is not the usual termination of an industrial dispute. Frequently the compromise is secured through the agreement of both sides to arbitrate the dispute by submitting the issues to an impartial judge or board. Arbitration is often resorted to by agreement in advance of the decision to strike, and the resolution of differences may be secured without the financial loss, the bitterness, and the occasional violence which a strike involves.

In all such cases, we enter the area of collective bargaining. The significance of this topic in its relation to peace and war in American industry deserves a more extended discussion.

COLLECTIVE BARGAINING

Collective bargaining is founded upon the employer's agreement to recognize the union as the responsible agent empowered to negotiate for his workers. Following this recognition, collective bargaining is the process of negotiation between representatives of management and representatives of workers, covering all the points commonly at issue between the two groups. These points usually include wages, hours of employment, working conditions, seniority rights, and similar matters. The agreements reached as a result of collective bargaining are usually stated in written trade agreements which set forth in great detail every condition of the labor contract.

Essential Factors in Collective Bargaining. To make collective bargaining an effective tool for industrial peace at least three considerations must prevail:[1]

1. *The right to organize:* The workers must be granted the right to form and belong to self-organized, self-directed, and self-financed labor organizations.
2. *Union recognition:* The workers must be granted the right to select and designate their own representatives who are to be their leaders and their spokesmen in all their relationships with employers, in the negotiations of terms of employment and in the application and fulfillment of those terms.

In other words, the employer recognizes the union as the collective bargaining agency through which the workers are to bargain with him in the determination of conditions of employment and to co-operate with him in their future application.

An important factor in the selection by employees of their own representatives from whatever source they see fit is that they can thereby develop bargaining specialists who will at least approximate the bargaining skill of the trained bargaining representatives of employers. The worker at the machine or bench may be exceedingly proficient in the performance of his particular task or trade, but he is, either by temperament or lack of experience, an unqualified bargainer. Moreover, being dependent upon a particular employer for his job, he might be induced by fear or pressure to let down in his demands; or sacrifice the interests of his constituents in other ways.

3. *Written trade agreements:* The understanding arrived at in the course of bargaining negotiations between the representatives of employers and employees is customarily embodied in a written trade agreement. The basic conditions of employment, with detailed stipulations of wages, hours, and a variety of miscellaneous but vitally important conditions, are frequently so comprehensive and

[1] David J. Saposs, *Written Agreements in Collective Bargaining,* Research Memorandum No. 2, National Labor Relations Board, Washington, April, 1938.

. . . technical that their careful and skillful recording is imperative. Add to these complicated subjects the need for creating machinery for administering, interpreting and renewing the agreement and it becomes evident that the terms of understanding must be written in order to reduce to a minimum misunderstanding and friction. It has therefore been taken for granted by employers, unions, students of labor relations and others, that a written trade agreement is the usual form in which the results of collective bargaining negotiations are recorded.

It is apparent that collective bargaining is carried on most successfully when the workers are represented by a strong union. In terms of this statement, a strong union is one which is supported by most of the workers in the plant, led by officers of intelligence and experience who hold the full confidence of the members and are able to enforce an effective discipline voluntarily yielded in a democratic organization.

Problems in Collective Bargaining. A number of problems have been suggested by the history of collective bargaining in the past decade. Among the most controversial issues is the question of whether all workers in a plant shall be compelled to join one union for collective-bargaining purposes. The attitude of the union member is easy to understand. The members of the union, through their elected representatives, advance their demands, bargain with the management, and are granted wage increases and improvements in working conditions. The management cannot distinguish between workers. Wage increases must be granted to all employees, not merely to union members. If they were granted only to union members, indeed, the others would soon join the union. The union member argues that he pays union dues, takes the risk, exerts the effort — and the nonunion workers benefit. It is logical for him to conclude that the only fair arrangement is the closed shop, in which all workers must belong to the union.

Another vexing problem is encountered when rival unions succeed in organizing sections of the working force, and each claims to represent a majority of the workers. Solution of this type of difficulty has been assumed by the National Labor Relations Board which enters, as an impartial body, to conduct a secret ballot of the employees to determine which union has majority support which entitles it to represent all the workers.

A third difficulty arises in the bargaining process itself. To what extent are the real issues of employees' need for higher wages

or shorter working hours, the management's ability to assume higher labor costs without wiping out profits, brought clearly before the parties engaged in discussing a new trade agreement? Will the ultimate settlement be a legitimate compromise dealing equitably with the needs and abilities of both parties? Or will it be determined by the comparative bargaining strength of the two parties?

Space does not permit discussion of the hundreds of problems of detailed adjustment of wages and hours of work which enter into every collective-bargaining agreement. The issues are so complex that a trade agreement drawn up as the result of collective bargaining may truly be described as an instrument in a system of "industrial jurisprudence," as part of a code of civil rights in industry.

Union-management Cooperation. In the long run, the only basis for industrial peace is the recognition by employers and employees that the collective-bargaining technique offers a means for bringing into the common ground of compromise what appear on the surface to be the opposing interests of management and labor. The practice of collective bargaining may, over a period of years, demonstrate to both parties that they have more common than opposing interests.

Unions traditionally have regarded their function to be chiefly one of protecting workers. It is entirely natural that they have followed this line of reasoning. In carrying out this function they have rarely attempted to explore management's interests or to find out wherein the interests of management and labor are identical. Few unions have undertaken to aid management in increasing efficiency. Most unions have opposed measures designed to increase efficiency, because they have feared that increased efficiency could result only in decreased employment or, at best, in the retention by management of all gains resulting from increased efficiency.

This attitude has been a logical one, adopted in self-defense in a period when many unions have been forced to fight for their right to exist, and when many employers have been violent in their opposition. Unions and management have often regarded one another as enemies. For this unfortunate situation management is in large part responsible. Neither management nor unions have recognized that in the long run a reduction in the

costs of operating a plant will increase that company's business and thereby increase employment and make possible higher wages. If this were widely recognized, more employers would encourage their workers to aid in increasing the efficiency of operations, and more workers would cooperate in making this possible.

Failure to recognize this fundamental truth can be traced to the brief history of relations between management and organized labor. Collective bargaining is a new device. Management and workers have yet to discover its full potentialities. There is at least the possibility of an industrial statesmanship in the years ahead, based on a more thorough understanding of the way in which the economic system functions and of the common interests of all participants in the system.

DEFINITIONS

Arbitration. Procedure for resolving disputes by mutual agreement to submit debated issues to impartial individual or group.

Black list. Ordinarily refers to list of names of union members, circulated among all employers in an area, in order to bar them from employment in all plants.

Closed shop. As generally understood, agreement by employer to employ only union members.

Craft union. Organization of workers engaged in a single trade or occupation, as bricklayers, carpenters, plumbers, etc.

General strike. Organized work stoppage in many trades and industries, designed to bring about a complete paralysis of business activities in the selected region.

Industrial union. Organization in a single union of all workers in a given industry.

Jurisdictional dispute. Struggle between two labor unions.

Seniority rights. Prior claims of long-term workers as applied to discharge (last hired is first fired) or promotion (workers with longest employment record have first right to promotion).

Sit-down strike. Work stoppage accomplished by workers who remain within the plant without performing any work.

Sympathetic strike. Strike by members of one union designed to help another union engaged in a strike.

Yellow-dog contract. Agreement by worker to refrain from joining a union.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What are four reasons why laborers organize?
2. Give five reasons why some workers do not organize.
3. When and in what industry did American unionism originate?
4. When were the Knights of Labor organized? What kind of workers did they attempt to organize?

5. What were the basic supporting units of the new union?
6. What did the labor sections of Section 7 (a) of the National Industrial Recovery Act provide?
7. What are the main provisions of the Wagner Labor Act? What does the N.L.R.B. do?
8. In what fields is the C.I.O. stronger? In what fields does the A.F.L. dominate?
9. Describe three sharply contrasting employer attitudes toward organized labor?
10. Name four weapons employers use in order to stop labor organization.
11. What is the basic aim of organized labor?
12. Why is a closed shop important in strengthening the bargaining position of a labor union?
13. What weapon is the underlying strength of organized labor?
14. Give reasons for the increase of strikes in periods of prosperity and their decrease in periods of depression.
15. Mention one method by which unions keep their members from losing heart while striking.
16. Upon whom does the sympathetic strike place the greatest burden? How does this force an employer to come to terms?
17. Explain collective bargaining.
18. What factors should employees take into consideration when selecting representatives for bargaining purposes?
19. Make out the case for the closed shop.
20. Why should unions, in the long run, not promote their own interests at the expense of the manager's interests and at the sacrifice of plant efficiency?

B

1. We oppose producers' monopolies which fix the prices for commodities. Why do we permit and even encourage workers' monopolies which fix the prices for labor?
2. Why has labor-union organization not extended to women, children, Negroes, white-collar workers, and unskilled workers as rapidly as it has to other groups?
3. Why is the position of union organization weak in periods of depression and strong in periods of prosperity?
4. Compare the Knights of Labor with the Committee for Industrial Organization.
5. Why did the Knights of Labor fail to survive?
6. How did the American Federation of Labor differ from the Knights of Labor? Why was it called a "federation"?
7. Remember the laissez-faire notion that supply and demand conditions should determine the price of a commodity at a given time and in a given place. Are codes of fair competition consistent with this idea? Can we say that they are another encroachment on the freedom of private enterprise?
8. Are codes of fair competition designed to benefit the public or the producers? Why is this true?

9. Unions are strongest in periods of prosperity. How, then, does it happen that union membership increased so markedly in 1932–1935, depression years? Why did industrial unions particularly boom?
10. Give your opinion of the rightness or wrongness of the C.I.O. in its struggle against the A.F.L.
11. Can you in any respects defend the employer who bitterly opposes all forms of labor organization? Does he have any justification — long-run or short-run —for this point of view?
12. Is it fair for labor unions to condemn employers who furnish social and recreational facilities as "paternalistic"? Are they not discharging their social responsibilities?
13. From the point of view of the public is there anything favorable to be said for company unions? Do they not effectively identify workers with their companies, thus leading to cooperation based upon an understanding of mutual problems rather than upon coercion?
14. How far can we go in respecting the aim of organized labor to eliminate competition among workers without destroying the free-enterprise system?
15. Perhaps the free-enterprise system has outworn its usefulness. Would it be better if the groups in each economic area drew up a code of "fair" competition which would eliminate "cut-throat" tactics — and which would be enforced by the government?
16. When demand for a product falls (as in a depression), prices also fall. Comment on the desirability of labor unions' not permitting costs to fall correspondingly.
17. Should the laborers' right to organize be an absolute right — a right with which no one can interfere? What limitations should be placed on it?
18. To whom do labor unions have responsibilities? To whom do labor-union leaders have responsibilities? What will happen if they ignore these duties?
19. In what circumstances can the collective-bargaining process work to further the interests of both the employer and his employees? Is this desirable? Why?

C

1. Compare the historical development of labor unions in the United States with their development in England.
2. Write a paper comparing the medieval craft guilds with the A.F.L. and the C.I.O.
3. Read the National Labor Relations Act. What rights does it give organized labor? What procedures does it establish in order to insure the protection of these rights?
4. Select an industry with which you are — or readily can be — familiar, and answer the following questions:
   a. How many men does it employ?
   b. What is the ratio of unskilled to skilled labor?
   c. Are the men organized? If they are, to what union do they belong?
   d. Why did this union get a foothold rather than some other union?
   e. Have the men noticeably benefited from this union? Has there been a wages increase or an hours decrease as a result?

f. Is there a company union? Does the company sponsor social and recreational activities? What is the company's attitude toward unionization?

5. Write an original paper giving your own opinion of the best solution of the general problem of labor versus capital. How can we best end poverty, misery, ignorance, and unemployment among laborers and at the same time not hamper the efficiency of industry?

SUGGESTED READING

Brooks, R. R. R., *When Labor Organizes*, Yale University Press, New Haven, 1937.

———, *Unions of Their Own Choosing*, Yale University Press, New Haven, 1939.

MacDonald, Lois, *Labor Problems and the American Scene*, Harper & Brothers, New York, 1938.

Walsh, J. R., *C.I.O., Industrial Unionism in Action*, W. W. Norton & Company, Inc., New York, 1937.

PART FOUR

MARKETING

First, commodities are produced. Then, they must be marketed. In Part Three, we studied the organization of production. Now in Part Four, we take up the organization of commodity distribution, commonly referred to as "marketing."

The marketing process includes all business activities necessary to move goods and services from producers to consumers. It begins with the movement of goods from farms, mines, and forests. It includes the movement of goods from manufacturers' plants all the way to the ultimate consumers of merchandise. It includes all the services utilized in the distribution of merchandise. It includes the study of all the business agencies engaged in the marketing process: retail stores, wholesale enterprises, brokers, commission merchants, and storage warehouses. It includes those agencies engaged in service activities, extending credit, aiding in transportation, grading and standardizing, and supplying news about prices and marketing activity. It is the study of the ways in which between one-fourth and one-third of all the gainfully employed earn their living. It is the study of activities, the cost of which makes up more than half of the average price of the commodities consumers buy every day in retail stores.

Let us begin this survey with an over-all review of the marketing process. Then, splitting the structure of marketing into sections, we can take up in succession the marketing of farm products and other raw materials, wholesaling, and retailing.

CHAPTER 17

THE NATURE OF THE MARKETING PROCESS

Consider a loaf of bread on the counter of a grocery store, sliced, wrapped, ready to be sold for 10 cents. What can we discover about the nature and complexity of the marketing process by studying the story behind that loaf of bread? How did it reach the retail store? Before the bread was baked, what marketing activities were involved in delivering flour and other ingredients to the baker? Before the flour was milled what marketing activities were involved in the movement of wheat from farm to mill? Our interest is first awakened when we see the bread on the grocer's counter. But the marketing process began long before. It may have started thousands of miles away from the grocery store, on a wheat farm in the Middle West.

The marketing process begins when the wheat leaves the farm. After the harvest the farmer usually transports the wheat by truck or wagon to a neighboring storage agency, called a "country wheat elevator." The manager of the elevator grades the grain and buys it from the farmer. How does he determine how much to pay for a bushel of wheat? His payment to the farmer is determined by reports on prices paid for wheat at the country's leading grain markets. These price data are available almost instantaneously in all parts of the country by means of telegraphed market bulletins. Price quotations are also published every day in leading newspapers.

Now the operator of the country elevator owns the wheat. He bears all the risks which are attached to the ownership of merchandise. He has paid the farmer and performed a financing service in the marketing process. He may have borrowed money from a bank in order to complete his deal with the farmer.

Every day during the harvest period he purchases wheat from farmers. When he has assembled a quantity he ships the wheat to one of the country's large central or terminal grain markets, such as Kansas City or Chicago. Here the wheat may be sold to a flour miller or to the operator of a large storage elevator. If it is sold to a terminal elevator, it will be cleaned and dried.

Eventually, the wheat is sold to a miller, an exporter, or a cereal manufacturer.

Wheat sold to a miller is transported to his plant. The miller processes the wheat into flour. Then again marketing activities take up the burden of selling the flour to bakers and delivering it to them. The baker is also at the end of a series of marketing processes which deliver to his plant all the other ingredients which go into a loaf of bread. Finally, the bread is sold and delivered to retail grocers. The consumer sees the loaf on the counter, buys it, the grocer delivers it with the rest of the order, and the marketing process is finished.

Behind every product on sale in a retail store lies a long, complex series of marketing activities similar to the process just described for a loaf of bread. Many business men and many business agencies are involved, time is consumed, costs are incurred. All these activities are included within the general subject we call "marketing."

HISTORICAL DEVELOPMENT OF MARKETING

In the era of the petty artisan, before the Industrial Revolution, marketing was relatively simple. Trade was confined almost entirely within each community. The shoemaker, the coppersmith, and the cooper sold their products to their neighbors. The extension of the market beyond the walls of the local community occurred only at the time of the periodic fairs which attracted business men from some distance, where an exchange of products was effected between the artisans of scattered communities. A very small volume of foreign trade existed, confined almost entirely to luxuries such as furs and spices.

In the sixteenth and seventeenth centuries the boundaries of trade were extended and the marketing process became somewhat more complex. Wholesalers and retailers multiplied and the variety of goods available to consumers was greatly increased. Even as late as 1800, however, the English and American marketing systems were simple and on a small scale, when compared with the structure of modern distribution. Producers were not yet seeking national markets for standardized, branded, mass-produced merchandise. Sales-promotion devices, advertising, and the planned organization of distribution were almost nonexistent. The auxiliary services of transportation, storage, and finance were

still in a rudimentary stage of development. Business men were just beginning to understand the significance of the Industrial Revolution in production. The best brains were concentrating on the technical, engineering, and organizational problems of manufacturing. Distributing the goods produced by the new factories was not regarded as either a difficult or a rewarding task.

Effect of the Industrial Revolution on Marketing. The most important influence of the Industrial Revolution on marketing came through its stimulus to mass production. Mass production can be advanced to its most efficient level only if the products of the factories can be sold at a profit. Mass production depends, therefore, upon two things: (1) mass markets, and (2) a distributing system capable of moving goods from factories to markets and disposing of the goods at prices sufficient to yield a profit above the total of manufacturing and marketing costs combined. The Industrial Revolution made mass production a possibility. But it was the organization of mass marketing which led business men to use the newly discovered techniques of power-driven machine production.

Mass production made slow progress in the United States in the first half of the nineteenth century. Among the reasons which may be cited for this delayed development were: (1) the abundance of land, which encouraged agriculture rather than manufacturing; (2) the scarcity of capital, which kept business on a small scale; (3) the high price of labor, a common phenomenon in frontier countries; and (4) the higher profits to be earned in agriculture and sea-borne commerce. During the greater part of this period the country was dependent on Great Britain for much of its supply of manufactured goods.

The foundation of American manufacturing can be traced to the tariff barriers which were first erected by the Tariff Act of 1816 and were reinforced by the tariff laws of succeeding years. Behind these walls which shut out foreign manufactures, the infant American industries grew to independence. In their growth, they directed the attention of business men to home markets, and by that action first exerted pressure to develop a system of mass marketing.

The improvement in transportation facilities, first by inland waterways and then by railroad, aided manufacturers to reach distant markets cheaply and quickly. Cities founded at the

juncture of transportation systems grew more rapidly than other cities less fortunately situated.

Toward the end of the first half of the nineteenth century and in the beginning of the second half, the pattern of the modern marketing system began to work itself out, evolving from the unplanned and uncoordinated distribution process of the early years of the Industrial Revolution. Manufacturers began to sell their goods regularly to wholesale enterprises located in the larger cities. Wholesalers in these cities utilized the transportation web, of which they were the center, to distribute manufactured goods to the surrounding territory. Wholesalers also sold to retailers within the city limits and to general stores in the outlying small towns. In the larger cities, retail stores were beginning to specialize in the sale of related types of merchandise; in the small towns, the general store was still the common type of retail enterprise.

Mass Marketing. The last stage in the history of marketing dates from the closing years of the nineteenth century. This is truly the period of mass marketing. In these years retail institutions grew to giant size, first through the development of the modern department store, then through the growth of mail order houses and chain store systems, and finally through the erection of giant specialty stores. At the same time, universal compulsory education created a mass market of readers to whom millions of copies of newspapers and magazines were sold. These periodicals quickly were seized upon as media for nation-wide advertising. In the 1920's the radio supplemented newspapers and magazines as devices for extending sales promotion into every home. Any manufacturer with adequate financial backing could tell the story of his product to a national audience.

During this period the importance of the consumer in the marketing process was widely recognized. Increasingly, consumer purchasing habits and buying preferences were consulted as guides to the production and distribution of commodities. At the same time, business men began to realize that good management could expect as many rewards in marketing as it had discovered in production. Managerial talents, which had been concentrated on production problems, were directed toward the tasks of marketing. An era of scientific management in marketing was initiated, the first fruits of which we are just beginning to

harvest. The slogan of this period of mass marketing might be expressed in these words: "We have solved the problems of manufacturing; now we must solve the problems of marketing. We know how to make goods; we must learn how to sell them."

ECONOMIC SIGNIFICANCE OF MARKETING

What place does marketing now occupy in the American economy? How important is it in terms of employment, costs, and services? It is difficult to supply exact answers to these questions because of the problems which are encountered when we try to classify every business activity as affiliated either with manufacturing or with marketing. But approximations will serve to indicate in general terms the economic significance of marketing in our economy.

Number Employed. About one-quarter of all those gainfully employed in the United States are engaged in marketing jobs. This figure may be a serious understatement of the importance of marketing in terms of the number employed, because it does not include many individuals engaged in auxiliary activities related to the marketing of goods and services. It is possible that as many as one-third of the gainfully employed are engaged in jobs related directly or indirectly to the marketing of goods and services.

Cost of Marketing. In terms of the cost of performing marketing functions we may offer certain other approximate measurements of the economic significance of marketing. In a comprehensive review of the costs involved in current marketing methods,[1] it was estimated that in 1929 the cost of commodity distribution claimed almost 59 per cent of the estimated total cost of producing and distributing commodities. In the figures of the survey, total processing and marketing costs were 65.6 billion dollars. Total marketing costs alone amounted to about 38.5 billion dollars. The distribution-cost total was broken down approximately as follows: cost of retail trade, 12.6 billion dollars; manufacturers' selling cost, 9.1 billion dollars; transportation cost, 8.8 billion dollars; cost of intermediary or wholesale trade, 7 billion dollars; and other marketing costs, approximately 1 billion dollars.

[1] *Does Distribution Cost Too Much?*, The Twentieth Century Fund, New York, 1939, pp. 117–118.

Of greater interest, perhaps, are measures of marketing costs for specific commodities. In the case of bread, it has been estimated that approximately half the retail price of every loaf represents payment for costs incurred in marketing activities. In the case of many agricultural products used directly as food, marketing costs may cover substantially more than 50 per cent of the retail price. Estimates of the relation of marketing costs to the total retail prices of men's suits and shoes extend as high as 50 per cent.

Service of Marketing. There is, of course, no way to measure the economic significance of marketing in terms of the service it supplies. It should be observed, however, that without an efficient mass-marketing system, the genius of the American production organization would be wasted in idleness.

Some indication of the growing recognition of the service of marketing in the functioning of our economy is offered by the growing interest in and the study of marketing. This interest is demonstrated in a variety of ways. In the business world, marketing stands on a par with processing. The selling tasks are usually concentrated within a sales division of each organization, which ranks as a major operating unit within the enterprise. Marketing research has risen to the status of a recognized profession, practiced by independent organizations as well as by special departments attached to individual business concerns. Divisions of federal, state, and local governments are active in marketing research and in the study of general and detailed problems of marketing. So, too, are business research bureaus in many of the country's leading universities, both endowed and state supported.

The sum of these activities indicates a clear recognition of the economic significance of marketing. It suggests, also, that business men, government officials, and students are in full agreement about both the desirability and the possibility of improving marketing methods. There is wide agreement that marketing has suffered from the concentration of attention on production. Now there is a universal search for facts on the basis of which marketing methods can be subjected to more searching analysis. From this type of analysis, every business day sees new experiments which, by trial and error, are lifting the level of efficiency in marketing. Every such improvement in marketing methods is a direct contribution to higher living standards for all.

COMMODITIES ENTERING INTO MARKETING

In beginning the study of marketing it may be helpful to classify the various commodities which enter into the marketing process. Commodities within each classification follow generally similar marketing patterns. By understanding the characteristics of each group of commodities and the common marketing plan for that group, we are relieved of the serious task of learning the method of marketing every individual commodity.

Most students of marketing begin by dividing all commodities into two broad classes: (1) industrial goods (sometimes called "business goods," or "producers' goods"), and (2) consumers' goods. Industrial goods are commodities which are used in the production of other goods. Examples of this class of commodities might include all kinds of raw materials, machines and tools sold to factories, industrial fuels, and similar goods. To draw the sharpest possible contrast, let us say that consumers' goods are commodities which are purchased by ultimate consumers (the 131 million people in the country) for their own use, to satisfy their own needs, and only incidentally to aid in further production. Examples of consumers' goods would be food, clothing, shelter; in short, practically the entire range of merchandise we buy every day in retail stores.

Once these two broad classifications of industrial goods and consumers' goods are established, it is convenient to set up certain subdivisions. In the case of industrial goods, the subdivisions may include the following: (1) raw materials; (2) semimanufactured materials and parts; (3) operating supplies; (4) installations or major equipment; and (5) accessory equipment. The consumers'-goods classification is customarily subdivided into: (1) convenience goods; (2) shopping goods; and (3) specialty goods.

Industrial Goods. The group of raw materials includes products such as cotton, rubber, copper, and wheat, which enter into production, but which have as yet undergone little or no change in form. Semimanufactured materials and parts (often referred to as "fabricating materials and parts") are commodities entering manufacturing, which have already undergone some processing or change in form. Examples of this class of goods might include the many parts of an automobile which are purchased by the car manufacturer from outside suppliers (axles,

spark plugs, piston rings, ignition switches, door latches). Operating supplies are not incorporated in the finished product, but are used up while the factory functions. In this group fall such goods as cleaning fluids, brooms, mops, office supplies, waste rags, and similar commodities. Installations, or major equipment, include the large industrial machines and equipment, such as dynamos, boilers, blast furnaces, drills, and presses. These goods do not become part of the finished product. They are slowly used up in the productive process; after a period of years they must be replaced. In the class of accessory equipment are grouped such goods as office equipment; factory trucks, elevators, and conveyors; and testing equipment. It is characteristic of this class of articles that they are not utilized directly in production. They aid in the functioning of the factory, but do not operate directly on the goods being produced, as do the major installations.

Consumers' Goods. Consumers' goods, it was indicated above, are usually divided into three classes: (1) convenience goods, (2) shopping goods, and (3) specialty goods. All three classes of consumers' goods are distinguished from industrial goods by their purchase and use by ultimate consumers. They are not used in business operations nor are they resold to other users. In connection with this description of the characteristics of consumers' goods it is important to observe that the same type of merchandise may be at one time industrial goods and at another consumers' goods. Typewriters are classed as industrial goods when they are purchased by a business concern for use in its office. They are classed as consumers' goods when purchased by ultimate consumers for use in the home for social correspondence or by students. The basic reason for this classification is that marketing methods for industrial goods are generally unlike marketing methods for consumers' goods. At the same time, there is great similarity in marketing methods for different types of industrial goods, and equal similarity in marketing methods for different types of consumers' goods.

Convenience Goods. Convenience goods are articles which consumers like to purchase with a minimum of effort. Convenience goods are usually sold at low unit prices and are purchased frequently. Style is of little importance in the consumer's decision to purchase. Most of the merchandise sold in drug and grocery stores can be listed in this classification. Because of consumer

buying habits for this type of merchandise convenience goods are usually sold in neighborhood stores. It is important for the manufacturer of merchandise in the convenience-goods classification to attempt to get as many stores as possible to stock and sell his merchandise. This will protect him against consumers' decisions to buy another brand of the desired merchandise if the brand first requested should not be available. It should be observed that in buying merchandise in the convenience-goods classification consumers will seldom go far out of their way or exert any great effort to purchase a specific brand.

Shopping Goods. In the shopping-goods classification are included all varieties of merchandise typically purchased by consumers only after careful inspection of the offerings of several stores, with comparisons of prices, styles, and quality. Shopping goods are not purchased as frequently as are convenience goods. The unit price is usually high enough to justify considerable expenditure of time. Consumers are willing to take the time necessary to compare merchandise in several stores. Unlike the purchase of convenience goods, which usually occurs soon after the initial impulse to buy, the purchase of shopping goods may be deferred for several days or even weeks. Examples of merchandise in the shopping-goods classification are easily found: men's and women's clothing, shoes, and furniture.

Founded on these buying habits, the marketing of shopping goods does not follow the pattern of the marketing of consumers' goods. The most important part of consumer buying habits for shopping goods is comparison. Therefore, shopping goods are usually sold in stores in central retail-shopping districts, rather than in neighborhood stores. Stores selling shopping goods usually are found clustered together in these areas, so that purchasers can readily examine the merchandise of several stores. In directing the marketing of shopping goods, the manufacturer does not attempt to get his merchandise into every possible retail outlet, as does the manufacturer of convenience goods. Rather, he seeks to sell his merchandise through stores with good locations for tapping the shopping crowds, reputations for carrying high quality merchandise, and a willingness to display attractive merchandise in the shopping-goods category.

Specialty Goods. Specialty goods include all merchandise in the purchase of which consumers are willing to make great

efforts in order to get exactly what they want, and often insist upon securing a particular brand of merchandise even when it is not readily available. Goods in this classification usually sell at high unit prices. Among the examples of this type of merchandise might be cited automobiles, high quality watches, and the most expensive brands of men's shoes.

Since specialty goods are bought infrequently, on the basis of strongly developed consumer preferences, the manufacturer of merchandise in this classification does not find it necessary to secure many or even several retail outlets in a community. One retailer may be sufficient; he will not lose sales to other brands, because consumers have established buying habits for specialty goods and they will undergo great inconvenience, if necessary, to get what they want.

It should be observed that these subdivisions of the broad class of consumers' goods are not absolutely rigid groups. Most consumers purchase inexpensive groceries as convenience goods, buying in the nearest store. But some housewives shop very carefully for groceries, comparing quality and prices in several stores and spending their budgetary allowance for food at several retail stores. Some men care little about clothes, make all their purchases in one convenient shop, and ignore comparative values in other stores. They buy clothing on a convenience-goods basis, although most purchasers shop for their clothing. There is a good deal of overlapping as a result of individual buying habits. The classification described above should be regarded simply as a description of general buying habits. Despite its generality, the classification is important, because all manufacturers, all wholesalers, and all retailers meet with success in business in direct relation to their ability to anticipate, analyze, and serve the established patterns of consumer buying habits.

MARKETING FUNCTIONS

A number of specialized activities are performed in connection with the marketing of goods and services. These are commonly described as marketing functions and may be classified in the following manner: (1) selling; (2) buying; (3) transportation; (4) storage; (5) standardization and grading; (6) risk assumption; (7) finance; (8) supplying market information.

Transfer of Title. The first two functions, selling and buying, center around the fundamental operation of transferring the title to merchandise, that is, effecting a change in ownership. Selling includes all activities connected with every phase of the process of making a sale. It includes the market research and consumer analysis necessary to locate purchasers and determine their preferences. It includes all phases of sales promotion and demand creation necessary to awaken in the prospective purchaser a desire to buy. It also includes negotiating the contract and securing agreement on the terms of sale, covering such points as price, quality, discounts, and date of payment.

The complementary function, buying, covers not only the completion of the transfer of title, but all activities necessary to make purchasing a rational, planned business procedure. The buyer must first determine his needs. Then he ascertains what sources of supply are available, and compares their offerings on the basis of price, quality, and service. The merchandise may require inspection or testing. The terms of sale must be negotiated and, finally, the transfer of title is effected. This process is relatively simple for the ultimate consumer making a purchase in a retail store. But for the industrial buyer, charged with responsibility for purchasing raw materials, supplies, and parts for a business enterprise, the buying function is complex and demands keen intelligence, balanced judgment, and broad experience.

Physical Supply of Merchandise. The essential process in both buying and selling is the transfer of title to goods; it is the exchange of ownership rights. There is no concern with the actual movement and handling of merchandise. This is covered by the functions of transportation and storage.

Because of the extent of the consumer markets which must be supplied in order to turn the wheels of mass-production factories, transportation is important in the marketing of almost all goods. A stream of commodities is constantly flowing from production points to markets, from raw-material supply sources to processing plants. For some commodities transportation costs account for more than half of the retail price.

Complementary to transportation in the physical supply of merchandise is the storage function. In order to maintain a flow of goods to all markets it is necessary to accumulate storage stocks at key points. Were this not done, any temporary failure of

transportation would be followed by a failure of supply where goods are needed. To any single producer, this would mean dissatisfied customers and lost sales. On a large scale and to the economy as a whole it would mean the breakdown of the orderly processes of daily life. Many products are supplied seasonally, yet must satisfy a year-round demand. Other products are produced throughout the year, but are demanded by consumers only during certain seasons. Storage alone can equalize these cases of unbalanced supply and demand.

Auxiliary Functions. In addition to the functions connected with transfer of title and with the physical supply of merchandise, there are a number of auxiliary functions in the performance of which many marketing agencies participate. These auxiliary functions have been listed above as standardization and grading, risk assumption, finance, and the supply of market information.

Standardization refers to the erection of classes, limits, or grades to which goods must conform and by which merchandise may be classified. All wheat is not uniform. Under governmental supervision, standards have been set up for grading wheat. In the same manner, standards have been set up for many other farm products. Standards have also been agreed upon for the classification of manufactured goods. Butter is tested and scored. Canned goods may be classified by grades, which take into account the proportion of liquid and solid materials, whole pieces and broken pieces, and the flavor and the appearance of the contents.

Standardization and grading are of significance in reducing marketing costs. They enable buyers to purchase with confidence merchandise which they have not inspected, solely on the basis of the statement of its grade. They reduce the need for inspecting samples. The widespread use of standardization procedures simplifies both selling and buying and diminishes the need for transporting and storing merchandise.

Risks are attached to every business venture. Necessarily, therefore, compensation for the assumption of risk is one of the recognized elements in the cost of marketing. Risks vary in nature, although they share one basic characteristic: they are inevitably attached to the ownership of merchandise. Among the more important risks may be listed the following: the risk of adverse price movement; the risk of style change; the risk of physical spoilage of merchandise; the risk of loss from fire or

theft; the risk of loss resulting from inadequate market information. Insurance is available for some risks. Others may be minimized by shrewd management. But for many risks there is neither insurance nor protection, and the ultimate consumer must compensate, in the purchase price of the goods he buys, those marketing agencies which bear the risks of ownership.

The financing function is performed at every stage in the marketing process. Middlemen in the marketing process — producers, wholesalers, and retailers — almost invariably must buy merchandise and wait some time before they can sell and collect payment. The ownership of merchandise demands an investment of money. Some enterprises can finance their operations without borrowing from banks or from suppliers of merchandise. But so great are the advance commitments required that throughout the marketing process sellers are compelled to extend credit to buyers by permitting them to delay payment.

Finally, the supply of marketing information is vital at all points in marketing. A middleman in the marketing of cotton must be informed about the size of the coming crop. He must also have exact information about the probable demand for raw cotton, and about the amount of cotton in storage, so that he can appraise the balance of supply and demand and estimate the probable future trend of prices. He must be in touch with advance news of governmental aid to cotton growers, for the possible effect such action may have on prices.

Or again, to draw an illustration from another field, the manager of a women's dress shop needs information about style trends and the relative popularity of various materials and colors. He seeks advance news about the styles being worn by the social leaders in his community, knowing that the mass of his customers will tend to follow. He must have this marketing information because the nature of the dress-manufacturing business compels him to buy garments several weeks before he can hope to sell them. If he errs in his advance appraisal of style trends or if his sources of style information fail him, he will be unable to sell his merchandise at prices that will repay the cost of the dresses and the cost of operating his store.

Economic Significance of Marketing Functions. One thing must be observed in connection with these marketing functions. They are necessary to the essential operation of transferring goods

from producers to consumers. Goods must be bought and sold, they must be transported and stored; some agencies in the marketing process must provide a measure of standardization; they must adhere to some quality standard; risks must be taken; financing must be performed; market news must be made available. They are all essential to the marketing process.

Frequently critics of the high cost of marketing suggest that the way to reduce distribution costs is to eliminate some of the middlemen in the marketing process. The removal of one or more middlemen may or may not reduce marketing costs. The removal of a middleman performing one or more of these vital marketing functions will reduce marketing costs *only if another agency can perform the function more efficiently.* The removal of the middleman transfers his functions to another business agency; it does not remove the necessity for performing his functions. The operator of a country elevator performs at least two essential functions in the marketing of wheat; he buys and he stores. If the elevator were removed from the marketing process for wheat, economies would be secured only if another business agency could buy wheat from farmers and store it at a cost lower than that incurred by the country elevator.

Under the stress of competition in marketing, business men are continually pressed to discover and put into operation more efficient ways to perform the basic marketing functions. The process of marketing is dynamic. Changes are constantly being introduced. But every change for the better can be only the performance of the basic functions at a lower cost.

THE ORGANIZATION OF MARKETING

Having surveyed the marketing functions and developed a useful classification of goods in marketing, we are now in a position to chart the organization of the marketing system. Through what channels of distribution do goods flow from primary producers to ultimate consumers? Through how many hands do they pass? What changes in ownership occur? How important are the various types of middlemen? What separates the customer making a purchase in a retail store from the producer of that merchandise? What separates the manufaoturer from his raw-material resource?

Basic Divisions in Marketing. Marketing covers the distribution of goods and services from farm, mine, and forest to factory

and ultimate consumer. Between the first producer and the ultimate consumer may intervene sundry middlemen. The marketing process for many commodities is complex. And the general structure of the marketing system, embracing all commodities, is infinitely diversified. It may be helpful, therefore, in trying to understand the organization of the marketing system if we divide the entire structure into several divisions.

The first division, in this arbitrary simplification, will include the marketing of goods from primary sources, covering agricultural commodities, the products of the extractive industries, and imports. The second division will include the marketing of manufactured goods as they are sold by manufacturers. The third division will include intermediary trade, or wholesaling. The fourth division will include all retailing activities. And the fifth division will include the ultimate consumers of merchandise. This area is most familiar to all of us.

Primary Sources. There are three major primary sources of goods in the marketing system: agriculture, the extractive industries, and imports. Some agricultural products are sold direct to ultimate consumers. We are all familiar with the sale of farm products at roadside stands. The volume of farm products marketed direct to consumers in this way is not large, however. Some farm products are also sold by farmers direct to retail stores. A larger proportion of farm products is sold direct to manufacturers for canning or other processing. But the bulk of the products of agriculture, amounting to nearly two-thirds of the annual production, is sold to middlemen of one type or another. These middlemen in turn sell to manufacturers, to other middlemen, and to retailers. The individual farm is a small productive unit. It is not economical to ship merchandise direct from the farm to large-scale purchasers in industry or to ultimate consumers. The middlemen who buy two-thirds of the agricultural products direct from farms perform many functions of which the most important is that of collecting produce in large lots for economical grading, storage, transportation, and selling.

A small proportion of the output of the extractive industries is sold direct to ultimate consumers and to retailers. But the bulk of the products, amounting to almost two-thirds of the total annual production of minerals, is sold direct to manufacturers. They are the essential raw materials of industry. This is also true of the

bulk of the imported products which feed the factories of mass production.

Marketing Manufactured Goods. As in the marketing of goods from primary producers, the system of marketing manufactured goods is not a simple one. Not all manufactured goods are sold to wholesalers for ultimate distribution to retailers and consumers. Manufactured goods are sold in different ways, depending on such factors as the kind of goods being distributed; the size, financial strength, and geographical location of sellers and buyers; the persistence of traditional types of business agencies in the industry; and competitive pressures.

A small proportion of manufactured goods is sold direct to such ultimate consumers as individuals, public utilities, and institutions. Fuller brushes and Realsilk hosiery are familiar examples of manufactured goods sold direct to consumers. Roughly an equal proportion is sold by manufacturers direct to retail stores. But by far the largest volume of manufactured goods, approximately one-half of the total, is sold to wholesalers and other middlemen.

The second major division of manufacturers' sales consists of goods sold to other manufacturers. This division accounts for nearly one-third of the total annual sales volume of all manufactured goods. It includes the sale of semifinished products or finished parts to other manufacturers. In this division are placed sales made by steel producers to industrial buyers, the sale of batteries and spark plugs to automobile manufacturers, and the sale of machine tools to airplane manufacturers.

Wholesale Trade. Wholesalers occupy an intermediary position between primary producers and manufacturers, on one side, and retailers, on the other. A little less than half of all sales made by wholesalers represents merchandise sold to retailers. This includes both manufactured goods purchased by wholesalers from manufacturers and agricultural products purchased from farmers. Slightly less than one-fourth of wholesalers' sales are made to manufacturers. In this division is included a diversified list of factory supplies and tools, as well as farm products, such as wheat and cotton, which are collected from farmers by wholesale middlemen and then sold to millers and textile manufacturers. An equal proportion of wholesalers' sales (somewhat less than one-fourth of the total) is made to other wholesalers. For some products as many as two or three wholesale middlemen take title to merchan-

dise on its way to retail stores. Relatively small quantities of goods are sold by wholesalers direct to institutions, such as schools and hospitals, to individual consumers, and to exporters.

Retail Trade. Practically all retail sales are made to individual consumers. Retail stores serve as the exit passage for the greater part of the goods handled by the marketing system and destined for purchase by ultimate consumers.

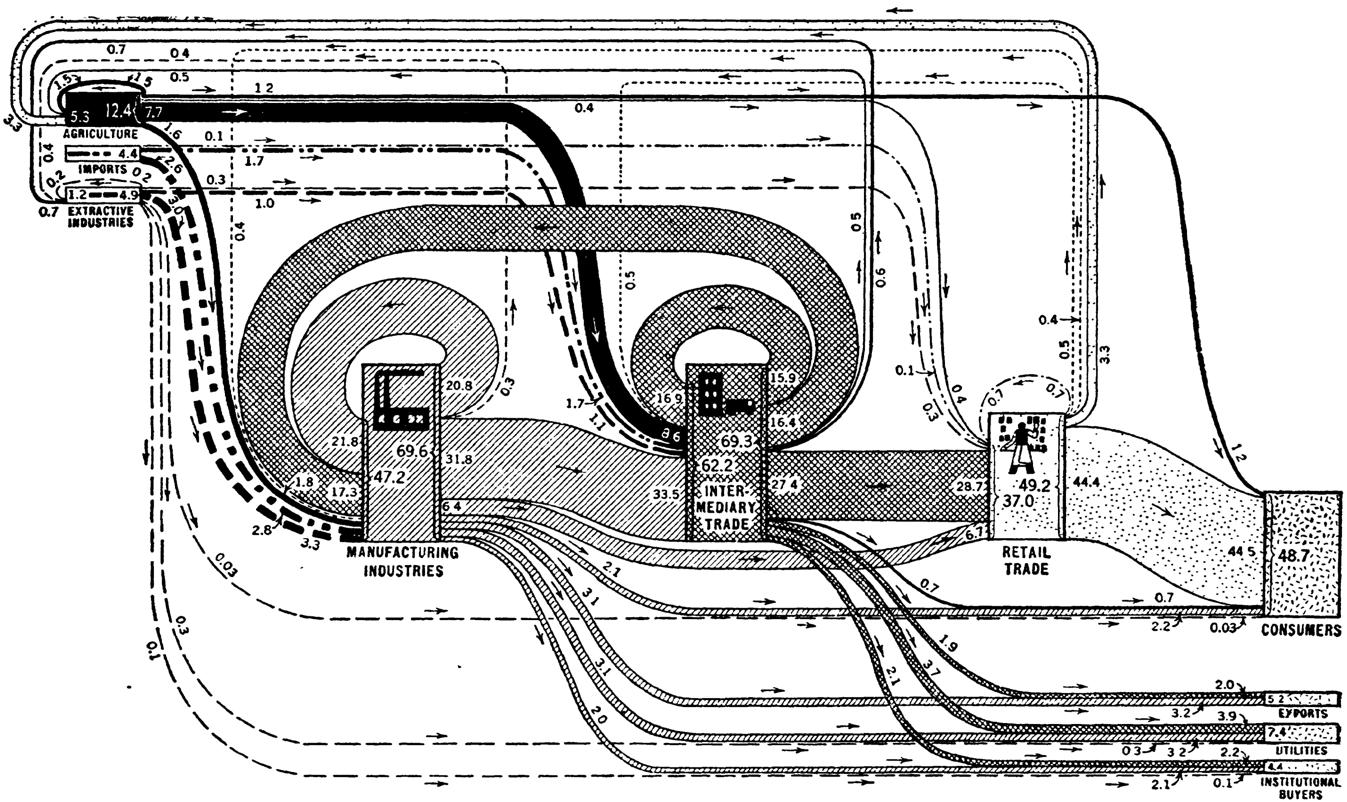
Channels of Distribution. Through these various divisions of the marketing system flow the goods produced in the American economy. From this brief survey of the structure of the marketing system we can conclude that the channels used in distributing goods are many and diverse. They vary all the way from the simplest direct-sale transaction between the farmer operating a roadside stand and the Sunday tourist stopping to make a purchase, to the complex series of transactions involved in marketing wheat which may pass through the hands of a series of middlemen before the loaf of bread reaches the retail store. Study of the more complex channels of distribution begins the explanation of why marketing costs take so large a share of retail prices.

MARKETING COSTS AND PROFITS

Let us return now to a more thorough discussion of the cost of marketing. It has been pointed out that a recent detailed study of the marketing system concluded with the observation that costs of distribution accounted for 59 per cent of the average dollar spent in a retail store. There will be opportunity in the following chapters to discuss the accumulation of costs in marketing from primary producers, in manufacturers' selling, in wholesaling, and in retailing. At this point we may consider the problem of over-all marketing costs. Is inefficiency the cause of high marketing costs? Can high costs be traced to the multiplication of middlemen? To what extent are services responsible for raising marketing costs? Are there important opportunities for decreasing marketing costs in the future? Do high marketing costs conceal unreasonable profits earned by marketing agencies?

Processing Costs versus Marketing Costs. Attention has been drawn to the close connection between the development of modern mass-production methods and the extension of marketing areas. The erection of specialized factories has placed on the marketing system the burden of disposing profitably of an increas-

CHART 26. THE FLOW OF GOODS IN THE UNITED STATES



SOURCE: P. W. Stewart and J. F. Dewhurst, *Does Distribution Cost Too Much?* 2d ed., The Twentieth Century Fund, New York, 1941.

ing volume of merchandise. At the same time the growth of large cities has contributed to the multiplication of retail stores which must provide for their customers a varied assortment of merchandise coming from specialized producers in all parts of the country. Transportation and storage costs have risen as production specialization has increased and as cities have grown. To this rising tide of costs the elevation of living standards has contributed a further demand for services. Store managers have sought locations in high-rent areas, in order to serve their customers better. They have created more attractive interiors, and have increased the number of clerks, while training programs have been developed to improve the quality of clerk service. Consumers have demanded, and stores have supplied, such additional services as credit and delivery.

For more than 50 years the burdens assumed by the marketing system have been growing increasingly complex. During this period marketing costs have risen while processing costs have been continually decreased. It must be recognized that economies in manufacturing have been made possible in large part through the increase in marketing costs. It should also be recognized that whereas large-scale production is usually more efficient than small-scale production, because of the possibility of mechanizing operations and utilizing power-driven machines, the reverse is true of large-scale marketing. Marketing still relies on personal service and human labor, and the use of machine techniques is limited. The extension of production volume is likely to lead to a reduction of unit manufacturing costs. The extension of marketing areas, on the contrary, is likely to lead to an increase in unit marketing costs. More services are required; more employees must be paid; more money must be expended in sales promotion. And with every extension of market areas, transportation and storage costs are increased.

Consumers' Interest in Marketing Costs. Two conclusions may be drawn from this discussion. First, much of the increase in marketing costs may be traced to the growth of mass production. It may, indeed, be suggested that production economies have been made possible by the increase in marketing costs. Second, consumers are themselves responsible for part of the increased cost of distributing commodities. They have demanded a bewildering variety of goods and a wide range of services. The supply of both

goods and services has been possible only at increased costs. The truth of this proposition is demonstrated by the fact that those retail stores which have deliberately decreased the variety of their merchandise and ruthlessly eliminated services have substantially reduced operating expenses. Some consumers are willing to buy in this way. The success of self-service supermarkets in the grocery business is ample proof of this. But the continued patronage of service stores selling all types of merchandise clearly demonstrates the preference of many consumers for full variety and full service.

Consumers are not injured by rising marketing costs, whatever the source of the increase, so long as retail prices are being reduced. Retail prices reflect the combination of both processing and marketing costs. When processing costs are decreased more than marketing costs are increased, total costs are reduced and retail prices paid by consumers reflect that decrease. This has, indeed, been the character of cost experience since the Industrial Revolution. Production costs have decreased; marketing costs have increased, at a slower rate; and total costs have been reduced. The consumer is injured by rising marketing costs only when they are not balanced by economies in production.

Inefficiency in Marketing. It is true that analysis of marketing methods reveals numerous instances of inefficiency, duplication of facilities, and waste. No part of the economic system operates without some waste motion. But only in recent years have business managers turned their attention to the intensive study of marketing methods. Production problems claimed them throughout the nineteenth century and during the early years of the twentieth century. There is good reason to believe that analysis of marketing methods, parallel to the older analysis of production methods, will result in the elimination of waste and the reduction of costs.

To the extent that rising marketing costs can be traced to basic changes in the whole economy — specialized production, the growth of large cities, higher living standards, widespread demand for variety and service — they are not the result of either inefficiency or waste. Rather they are the result of more effective satisfaction of the demands of a complex society. We know that marketing costs can be reduced by serving consumers' demands less effectively. We also know that this is not in the interest of

consumers. The nature of this type of economy is suggested by one list of services which might be eliminated in order to reduce marketing costs:[1]

1. They might discontinue selling for credit.
2. They might eliminate free delivery service, reduce the frequency of delivery or narrow delivery zones.
3. They might carry fewer brands of merchandise, thus restricting buyer choice.
4. They might stock smaller quantities of merchandise and refuse to handle slow-selling items, thus forcing many buyers to wait for delivery of orders.
5. They might occupy low-rent locations, thus forcing buyers to go out of their way to make purchases.
6. They might operate on an eight-hour instead of eleven-to-eighteen-hour-day, thus concentrating buying in shorter periods but also restricting service.
7. They might sell only in quantity, thus eliminating small-unit purchases.
8. They might locate only in large trading centers, thus inconveniencing people not living nearby.
9. They might confine themselves to staple merchandise instead of aggressively seeking out new merchandise and new styles, thus reducing obsolescence losses and mark-downs.
10. They might withdraw the returned goods privilege, thus reducing selling and handling costs and mark-downs.
11. They might reduce the number of salespeople, thus cutting labor cost but compelling customers to wait to be served.

The author suggested that a retail store which eliminated these services could cut operating expenses by 50 per cent, if it had any customers left. We may add that although action of this nature would probably force any single retailer into bankruptcy, all stores acting in concert could put such a program into effect.

More promising than a sweeping elimination of services might be a decrease in the variety of merchandise offered for sale, and a complementary reduction in both the multiplicity of competing brands and in competitive advertising. Further potential sources of cost reduction may be found in consumer education which will help consumers to buy more wisely.

Profits as a Cost Factor. There is little evidence to indicate that any substantial part of the high cost of marketing can be traced to high profits earned by marketing agencies. It has been estimated that the complete elimination of all profits earned by all marketing agencies from primary producer to ultimate consumer would result in a net average decrease in retail prices of less

[1] James L. Palmer, *The Journal of Marketing*, April, 1937, pp. 391–392.

than 3 per cent. Many marketing agencies lose money in more years than they earn profits. Particularly in retailing, the rapidity with which small enterprises are forced out of business suggests that profiteering is not common. Reduction in marketing costs must be sought elsewhere than in the curtailment of profits earned by marketing agencies.

For further evidence bearing on the relation of marketing costs to the tasks assumed by the distributive system it will be necessary to study in the following chapters the detailed organization of the marketing system and its functioning in the modern economy.

DEFINITIONS

Consumers' goods. Commodities purchased by ultimate consumers and not used in further production.

Convenience goods. Consumers' goods which consumers desire to purchase with a minimum of effort. These commodities are ordinarily of low unit value, are purchased frequently, and are sold in stores located near consumers, such as neighborhood drug and grocery stores.

Industrial goods. Often referred to as "producers' goods" or "business goods." Commodities which are purchased to aid in further production, such as manufacturing plant, machinery, raw materials, and supplies.

Marketing functions. The important specialized activities performed in the marketing process.

Shopping goods. Commodities which consumers purchase only after comparing prices, quality, and style in several stores. Examples are men's and women's clothing, millinery, and furniture.

Specialty goods. Commodities in the purchase of which consumers will make a great effort to buy the brand they prefer. Examples are automobiles, men's high-price shoes, and refrigerators.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What was the state of marketing in the era of the petty artisan?
2. Name the two elements upon which mass production depends.
3. Give at least two reasons why marketing activities became more important after the Tariff Act of 1816.
4. What proportion of employees in the United States are engaged in marketing?
5. Distinguish between industrial goods and consumers' goods.
6. Define shopping goods. In general, how are they marketed?
7. List eight marketing functions.
8. What are the jobs which transportation and storage perform?
9. Name four risks of marketing and how each may be minimized.
10. Name a field in which accurate marketing information is particularly important.

11. What are the four organizational divisions of the marketing structure?
12. What percentage of manufactured goods is sold to wholesalers and other middlemen?
13. What position do wholesalers occupy in the marketing structure?
14. Name some of the services which retailers perform. What effect do they have on costs?
15. How can we eliminate waste and reduce costs in the marketing process?
16. Is it true that a substantial part of the high cost of marketing is due to high profits earned by marketing agencies? Why?

B

1. How does marketing meet the test of a legitimate economic activity? Does it satisfy current consumer demands?
2. Are tariff subsidies of the kind instituted by the Tariff Act of 1816 economical in the long run? Don't they misallocate industry, thus increasing costs?
3. How does advertising meet the test of a legitimate economic activity laid down in question 1? Who are the beneficiaries of fierce competition in the advertising field? Is this desirable?
4. What should be the primary aim of all marketing activity? Is this apt to be the aim without government regulation? Explain.
5. In which field of consumers' goods — convenience goods, shopping goods, or specialty goods — is a trade-mark most valuable? Why?
6. In which of these same fields are we apt to get the most advertising? Why?
7. Is advertising usually designed to induce people to buy what would be best for them or what it would be most profitable to sell? Comment.
8. What are the unique functions of wholesalers which could not be performed by retailers with equal efficiency?
9. Why isn't it economical to extend the sale of agricultural products directly to consumers — as, for example, in roadside stands?
10. If consumers clearly understood that they were faced with the choice of less retailing services and lower prices for goods or more retailing services and higher prices for goods, which would they choose? Why?
11. Comment on the following statement. By advertising and other promotional schemes, which point up the services as "free," retailers encourage consumers to purchase more and more services — many of them worthless and even undesirable — which keep the prices of goods up and the retailers in business, but operate to the detriment of society.

C

1. Construct a chart depicting the historical development of processing techniques and marketing techniques, showing with especial clarity their effect upon each other.
2. Analyze the most important business organizations in your home town. What proportion of them are engaged in marketing? What proportion are engaged in processing?
3. Analyze the advertisements in a metropolitan newspaper. Are consumers' goods or industrial goods advertised? Are shopping goods, convenience

goods, or specialty goods advertised? Is the appeal to current demands or to demands which "should be"?

4. Resolved: Advertising activities should be sharply curtailed and closely regulated. Argue this statement either pro or con.

SUGGESTED READING

Hotchkiss, G. B., *Milestones of Marketing*, The Macmillan Company, New York, 1938.

Phillips, C. F., *Marketing*, Houghton Mifflin Company, Boston, 1938, Chaps. I, II.

CHAPTER 18

MARKETING FOOD AND RAW MATERIALS

Products entering the marketing system from the two important sources of primary supply — agriculture and the extractive industries — may be classified in various ways. There are many farm products used directly as food. Some of these products undergo processing, as when fruits and vegetables are canned or wheat is manufactured first into flour and then into bread. Other farm products, such as cotton, serve only as raw materials for industry. Natural products serve, also, as the raw materials of industry.

A broad distinction may be drawn between all farm products and all natural products in terms of the conditions of their supply: farm products are reproduced seasonally; the supply of natural products, such as iron and copper ores, is continually decreasing as we draw upon them. But in terms of the marketing methods used in handling these products, a more useful distinction may be drawn between all agricultural products on the one hand, and all natural products, on the other. The channels of distribution for farm products used as raw materials resemble the channels for farm products used as food more closely than they do the channels of distribution for natural products used as raw materials. This is a working classification founded on marketing methods.

The best way to attain an understanding of the marketing system is to begin with the realization that the channels of distribution utilized for any commodity are the result of conditions of supply and conditions of demand for that commodity. A method of marketing is not arbitrarily imposed upon a commodity. It is the result of competitive striving for the easiest, cheapest, most efficient, and most effective way of moving the commodity from where it is produced to where it is used or consumed. For this reason it is not necessary to describe in detail marketing methods for every important commodity. One set of supply-and-demand conditions creates the need for a certain well-defined marketing pattern. Another and different set of supply-and-demand conditions creates the need for a second marketing pattern. It is more important to comprehend the relation between supply-and-

demand conditions and the marketing system than it is to learn marketing methods commodity by commodity. In this way we discover the social and economic functions of the distributive system, and we understand its dynamic character.

SUPPLY CONDITIONS FOR FARM PRODUCTS

The farms of the United States make up almost seven million scattered productive units. Compared with the typical economic unit in manufacturing, the average farm is small, and farming as a whole rarely departs from the status of small-scale industry. As an industrial enterprise the farm differs from the factory in other ways. The manager of a factory determines in advance exactly the number of units he wants to produce, at preestablished quality standards. The manager of a farm does, indeed, plan the number of acres he will plant. But he cannot forecast the effect of adverse weather, drought, or insects upon the size of his crop at the harvest. His crop does not appear as a series of standard units of uniform, predetermined quality. The crop must be graded, and only then does the farmer know the approximate value of his season's production.

The Farmer as a Business Man. If the farm as an industrial unit differs from the factory in several important characteristics, so, too, does the farmer differ from the business man. The farmer has neither the training nor the experience of a business man. Most farmers know little about business procedures and less about the marketing organization which absorbs their crops. Few farmers understand the economic significance of marketing functions, or the costs involved in performing those functions. As a business man the farmer is further handicapped by his weak financial position. He must invest long before the harvest season brings him the bulk of his annual income. Bankers do not regard his operations as a good commercial risk. The farmer, therefore, is usually without the funds necessary to strengthen his business position. When he harvests his crop he is under strong compulsion to sell it immediately at prevailing prices.

Farm Products as Business Goods. The economic handicaps do not stop with farming and the farmer. Farm products also differ from most factory-produced commodities in several important respects. As they come from the farm they are nonstandardized. Whereas it is the aim of every business man to

make his product unique, to distinguish it from competing products, to mark its point of origin so plainly that consumers can insist upon securing the same product again, the farmer cannot do this. Wheat from one farm is indistinguishable from the same grade of wheat grown on a second farm. Wherever it grows in the South, cotton is cotton. The products of an individual farm never occupy an isolated position; they merge with the general flow of all similar products. They are sold at the same prices; they share the same prosperity and the same depression.

A business man locates his factory after appraisal of such factors as raw-material supply, major consumer markets, transportation rates, availability of power, and the requisite supply of labor. Farm products must be grown where fertile land and favorable climate dictate. Major producing areas are often at a great distance from major consuming areas. As a result, farm products often incur high transportation charges which add substantially to total marketing costs. Wheat from the prairie states ultimately finds its best markets in the large cities, many of which are clustered in the North Atlantic area. Sheep-raising states of the far West send wool to the mills of New England.

Supply Conditions Summarized. These, then, are the supply conditions for farm products which influence the organization of the marketing structure. Farm products enter the marketing system from millions of small, scattered production units. They are nonuniform, unstandardized. They require assembly, storage, and transportation to distant markets. They are produced under conditions of loose control over both quality and quantity. Their producers are usually weakly financed, unable to withhold crops in periods of depressed prices.

These supply conditions make certain demands upon the marketing system. The farmer cannot provide his own marketing organization. He cannot provide facilities for standardizing and grading, storage and transportation. The marketing system must perform these services. And to enable the farmer to maintain his financial stability, the marketing system must assume all the risks of ownership in connection with the performance of these services. It must purchase farm products at or near their point of production, make immediate payment in cash, and dismiss the farmer from additional participation in or responsibility for the marketing of his products.

To perform these functions there have developed a group of marketing middlemen and a system of primary and central markets. Standardization and grading, storage and transportation are all performed more economically when farm products are handled in bulk. The first job of the middlemen, therefore, is to begin a process of concentration which gathers farm products from scattered production units into pools large enough to permit efficient performance of the marketing functions. Examples of this process of concentration can be drawn from the marketing organization which handles almost every agricultural product. But before we undertake a detailed description of the marketing structure for a major crop, it will be helpful to consider the nature of the demand for farm products. The marketing structure for every commodity is the result of both conditions of supply and conditions of demand.

DEMAND CONDITIONS FOR FARM PRODUCTS

The demand for agricultural products may be broken down into two distinct classifications. The first classification is the demand for farm products used as food; the second is the demand for farm products used as the raw materials of industry. Demand conditions in these two classifications develop materially from one another because the consumers who frame the demands are different. There are 131 million different consumers of farm products used as food. There is a relatively small number of consumers for farm products used as raw materials. That is because the demand in this case is made up of industrial plants of the United States.

Demand for Food Products. The major characteristics of the demand for farm products used as food are the following: (1) stability, (2) country-wide distribution, (3) concentration in large cities. The demand is stable for practically as much food concentration in periods of depression as in periods of prosperity. There may be, it is true, a drop in the quality of the food purchased in depression years, but the basic quantity purchased continues with almost no change. For the marketing system as a whole this staple demand has great importance. It guarantees that in good times and bad there will be no fluctuation in the quantity of goods handled by every agent in the marketing process. It also suggests that price changes will respond readily to changes in the amount of

food products supplied, since changes in the demand for food products are negligible.

The country-wide location of the consumer market for food products imposes a burden on the marketing processes. Means must be discovered for assuring in every community, large or small, an adequate supply of all types of food products. The burden placed upon transportation and storage is clearly a heavy one. In connection with the distribution of consumers it is also desirable to observe the growth of large cities as the concentrated consumer markets. These cities represent bottlenecks of consumers who are not self-sufficient. Into these great cities every day must flow a tremendous supply of food products and again the agencies of transportation and storage bear the major burden.

The Demand for Raw Materials. The industrial demand for farm products used as raw materials differs materially from the consumer demand for farm products used as food. The industrial demand is a concentrated demand. The factories of this country are clustered together in a relatively small number of manufacturing cities. Further, unlike consumers who represent small economic purchasing units, factories purchase on a large scale. Again, in contrast to consumers who pay relatively little attention to standardization and grading of food products, industrial buyers insist upon careful standardization and grading of agricultural raw materials. Their machines require standard products and their purchasing methods, which involve buying raw materials at a distance unseen, necessitate the buyer's reliance upon universally recognized standards.

Again, in contrast to the consumer demand for food products, the industrial demand for raw materials coming from American farms is a fluctuating demand. The demand is apt to be great in periods of prosperity and low in periods of depression. This is particularly true for those agricultural raw materials which are used by the heavy industries. Their purchases of raw materials vary in direct proportion to their sales of finished products.

MARKETING CHANNELS FOR FARM PRODUCTS

Although they differ in many ways from one another, both the consumer demand for food and the industrial demand for raw materials impose similar strain upon the marketing system for agricultural products. Both require a concentration of products

from the millions of small scattered farms. In the case of the industrial buyer, the concentration process must proceed to the very doors of his plant. He buys on such a large scale that the output of hundreds of thousands of farms is required to fill the demand for a uniform standard product, purchasable in carload lots.

The consumer demand for food products also requires a concentration process extending through part of the marketing structure. Both farmers and consumers are widely scattered. It would be impracticable for a consumer to attempt to establish business relations with farmers in all parts of the country, so that he could supply himself directly with every type of food in his diet. The consumer wants to buy foods conveniently in retail grocery stores. The retail grocer in turn would find it very difficult to establish direct contact with a sufficient number of farmers to supply the assortment of food products his customers want. He, too, requires a central source of supply upon which he can draw.

Influenced in this way by the supply of and the demand for farm products, the marketing structure has developed a system of concentration and dispersion. Farm products are concentrated from individual farms. They pour through the great central markets of our large cities and they are dispersed through the wholesale and retail trade channels to ultimate consumer buyers. To illustrate this process of concentration and dispersion, consider the marketing structure for two basic commodities — wheat and cotton.

Marketing Wheat. Wheat is grown in a number of central states in this country on thousands of scattered individual farms. The bulk of the wheat crop is sold by the individual farmer to a local country grain elevator. There are various types of country grain elevators. Some are operated simply as independent storage agencies; others are operated as chain enterprises controlling a series of elevators; some are cooperatively owned by the farmers who store their grain. The country grain elevator, whatever its type, serves as the primary collecting agent for grain harvested on individual farms. The usual procedure calls for an immediate cash payment to the farmer for his grain. The farmer thus clears the entire transaction from his books and relieves himself from all further risk. He has an immediate cash market for his grain. The country grain elevator takes up the burden of marketing from

this point. It performs the function of collecting grain into quantities suitable for economic shipment to central markets. It performs a storage function — holding grain brought in by farmers until carload quantities are ready for shipment. Many elevators clean and mix the grain, thus beginning the process of standardization and grading.

From the country elevators most of the grain is transported to one of the large central terminal markets. Among the more important terminal markets for wheat may be listed Chicago, Buffalo, Milwaukee, and Kansas City. Wheat flows from country grain elevators throughout the Middle West into the central markets as into a funnel. Wheat shipped to the central market is usually sold either to operators of terminal elevators or to the large-scale buyers of wheat, such as millers, cereal manufacturers, and exporters.

The terminal markets for wheat serve as the apex of the concentration triangle, the base of which is supplied by thousands of individual wheat growers. The concentration process for wheat proceeds from these farms to the few great terminal markets, the principal intermediary agents being the country grain elevators.

The important sellers of wheat in the terminal markets are the large terminal elevator companies and the operators of line or chain country elevators. The principal buyers of wheat in the terminal markets are millers, cereal manufacturers, and exporters. Buyers and sellers usually have a common trading place, called the "grain exchange," where they meet every day to buy and sell wheat. All transactions are made in terms of standardized and uniform grades so that it is not necessary for purchasers to examine every bushel of the wheat they are engaged in buying.

From these terminal markets the dispersion process for wheat begins. Sales are made to millers and cereal manufacturers. The millers process the wheat and sell flour to bakers in every part of the country. The bakers manufacture bread, and the bread in turn is sold in retail stores in every community in the United States. The dispersion process is completed when the bread is purchased by millions of ultimate consumers. The cereal manufacturers sell to wholesale grocers or direct to large chain-store companies. Again, the dispersion process is completed with sale to ultimate consumers.

The entire process from farm to consumer may be visualized

first as a concentration to the narrow bottlenecks of the terminal markets and then a dispersion which ends with purchase by millions of consumers.

Marketing Cotton. A similar process of concentration and dispersion is discovered when we examine the organization which handles the great American cotton crop. Cotton is grown throughout the South. Important textile manufacturing centers are located in the New England states, in the Carolina-Georgia area, and in foreign countries. The consumer market for cotton products is nation-wide.

The concentration process for cotton begins on the small scattered farms of cotton growers. As in the case of wheat, we discover primary and central markets in the marketing structure for cotton. The first step in marketing cotton is the transportation of picked cotton to the local cotton gin where the lint is separated from the cotton seed and the cotton is baled. The baled cotton is hauled by the farmers to a near-by primary market, usually a county-seat town which serves as an assembly point where the farmer can quickly and easily sell his cotton and get cash payment. There are more than 1800 primary cotton markets scattered throughout the South.

Several types of buyers purchase cotton from farmers in primary markets. Some are independent merchants who buy from farmers and ship the cotton to central market purchasers. Other buyers in the primary markets are agents working on a commission basis for large cotton merchants in central markets. There are also cooperative enterprises maintained by groups of farmers, which function exactly as do the cooperative country elevators in the marketing of wheat.

The farmer finds in the primary market an immediate cash purchaser for his wheat. He also finds relief from further responsibility for the marketing process and from all future risks. The marketing of cotton is aided by these primary markets chiefly through the concentration of cotton in large quantities suitable for economic shipment. We can, indeed, discover this characteristic throughout the marketing system. It is rarely, if ever, economical to store or transport merchandise in very small quantities. Railroads offer relatively lower rates for merchandise shipped in carload lots than for fractional car shipments, the differential being justified by the reduction of handling costs incurred in moving carload

shipments, and the possibility of securing a continuous haul of merchandise from shipment point to delivery point.

The primary markets for cotton begin the concentration process which is brought to completion in the central markets. As in the case of wheat, the concentration process has developed because, under the strain of competition, it has proved efficient and effective. Cotton is marketed at a lower cost through a series of concentrating markets than would be possible if it were shipped from the individual farm to the ultimate purchaser.

Central markets for cotton corresponding to the terminal markets for wheat are the major concentration points for the annual cotton crop. Among the important southern cities which serve as central markets are New Orleans, Dallas, Galveston, and Savannah. Practically all the cotton raised in the South passing through the primary markets ordinarily moves through one of these great central markets. The major purchasers of cotton in the central markets are the several hundred cotton merchants who handle the bulk of the United States cotton crop. They purchase most of the cotton from shippers and merchants in the primary markets. They sell raw cotton to mill buyers in the great textile manufacturing centers of the South, in New England, and for export to textile manufacturers in foreign countries.

It is interesting to observe that although the concentration process for cotton extends from the individual farm to the terminal market, the dispersion process begins at that point. Cotton passes from terminal-market merchant to textile mill and from the mill the distribution broadens out as the cloth, woven and printed, passes to wholesalers and to dress manufacturers, and from these merchants on to retail stores to be purchased by ultimate consumers.

The Functions of Primary Markets. On the basis of this discussion we are now in a position to summarize the functions of primary markets in handling agricultural products.

1. Primary markets offer the small, financially weak, independent farmer an immediate cash sale.
2. Primary markets begin the assembly process, gathering farm products into quantities which can be stored and transported economically.
3. Primary markets often begin the functions of standardization and grading.

4. Primary markets serve as temporary storage points which may be helpful in maintaining an even flow of agricultural products all the way up to the ultimate consumer. They may be compared to the engineer's use of dams in preventing floods on rivers with an uneven flow.

5. Primary markets serve as transportation centers by concentrating farm products. They make possible easy and efficient loading and the realization of mass-transportation rates.

The Functions of Central Markets. Central markets perform the following functions in the distributive system:

1. Central markets serve as major concentration points for the products they handle.

2. Central markets provide ready meeting of large-scale sellers and large-scale buyers.

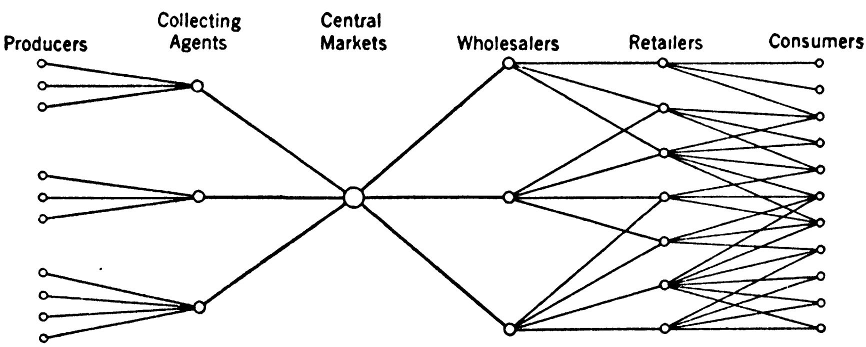
3. Central markets maintain storage reservoirs of merchandise which again may be compared to giant dams functioning in a system of flood control.

4. Central markets are usually located at the focus of a transportation web, making possible easy reshipment to any part of the country.

5. Central markets complete the functions of standardization and grading begun at the primary collecting points.

CHART 27

TYPICAL MARKETING STRUCTURE FOR FARM PRODUCTS USED AS FOOD



Price Fluctuations. Because agricultural products are marketed under conditions of intense competition, fluctuations in their supply have a direct effect upon fluctuations in prices. Years of good crops are often years of low prices. In other years when, because of

drought or unfavorable weather conditions, crops are very small, prices are apt to be high. Farm prices, as a result, fluctuate rapidly from year to year. They also change rapidly from month to month and even from day to day, following supply-demand relationships in the central markets and speculators' estimates of future supply-demand equations. The price of wheat may change as much as 5 cents per bushel during one business day.

Study of price fluctuations over a long period, including years of both prosperity and depression, indicates that farm prices on the average fluctuate more than do the prices of almost any other class of commodities. Prices for farm products fluctuate more than do the prices of the finished goods into which they are made. The price of wheat may fluctuate rapidly from day to day and from month to month, while the price of bread stays fixed at 10 cents a loaf. This occurs in part because wheat is only one of several ingredients the cost of which must be added to labor costs and machine costs in the manufacture of bread. In part, it may be traced to consumer inertia. Consumers become accustomed to retail prices for goods purchased frequently and force a continuance of customary prices.

COOPERATIVE MARKETING OF AGRICULTURAL PRODUCTS

Over a period of years extending back into the second half of the nineteenth century, there has been developing in the United States a system of cooperative marketing for agricultural products. This is largely the result of farmers' dissatisfaction with the functioning of independent agencies in the marketing structure. Many farmers have long held the belief that undue profits are earned by middlemen engaged in the concentration of agricultural produce. They have believed that farmers have received too small a share of the final retail prices paid for farm products. To secure higher prices for their products, farmers have attempted to set up their own organizations for marketing agricultural products as substitutes for private marketing agencies. Since 1925 the Federal government has encouraged the growth of producers' marketing cooperatives.

Fundamentals of Cooperative Organization. The organization of an agricultural cooperative differs from the organization of a private enterprise in a number of significant respects.

First, control is completely democratic. The foundation for democratic control is the fact that each cooperator has one vote in matters of executive policy, regardless of the number of shares of stock he owns. The principle of one man-one vote extends widely through almost every type of cooperative enterprise. It is designed to give as much power to the small farmer as to the large.

Second, profits earned by the cooperative are divided among the members in proportion to the use they have made of the cooperative's facilities. In the ordinary private-business enterprise, profits are shared in proportion to investment. A man who has invested 25 per cent of the capital of an enterprise expects to receive 25 per cent of the profits. The distribution of cooperative profits, however, is based entirely upon the use made of the cooperative's facilities. It disregards investment. This principle of distributing profits is customarily referred to as a "patronage dividend."

Beyond these two major distinguishing principles of cooperative organization, most agricultural cooperatives fulfill the same functions in marketing as do parallel private agencies. A group of wheat farmers may agree to organize cooperatively and to maintain their own country wheat elevators. In such an association the elevators are operated precisely as privately owned elevators would be operated and fulfill precisely the same functions. The success of cooperative organizations rests, therefore, on their ability to perform the required marketing functions at least as efficiently as they might be performed by private agencies. If the cooperative functions less efficiently than private agencies, there will be no profits to be distributed among the members, and it may be anticipated that the cooperative will fail.

Purposes of Agricultural Cooperatives. The chief purpose of agricultural cooperatives is, of course, to increase the income of those farmers who have formed the association. Income may be increased in several ways. By its control of the marketing process, the cooperative may be able to raise selling prices, that is, it may be able to secure for farmers higher prices than would be paid to them by independent marketing agencies. In addition to the possibility of securing higher prices, however, the cooperative may be able to increase the farmers' incomes by giving them a share of the normal profits. Still a third possibility lies in the fact that the cooperative may be able to perform the required marketing functions more efficiently than private organizations, thus reducing marketing costs

and sharing the gain among the members. Finally, the cooperative may be successful in helping its members to improve production methods and to lower production expenses through the pooling of equipment. This, too, will contribute to increasing income.

Success of Agricultural Cooperatives. The present importance of the cooperative movement in agricultural marketing is a significant measure of the success achieved. Cooperative associations market approximately one-third of all the dairy products produced in this country. They market almost one-quarter of all the grain and about 15 per cent of all the fruits and vegetables. Their activity is less significant in the handling of such products as cotton, poultry, tobacco, and wool.

A few of the largest cooperative organizations have achieved an unusual degree of success. Among the better known large cooperatives may be cited the Land O'Lakes Creameries, Incorporated, an organization representing more than 400 small local cooperative creamery associations in the Minnesota, Wisconsin, and Dakota region. This cooperative markets all the butter produced by its members. It sells through sales offices in the principal eastern cities, and in addition acts as sales agent for its members in handling such related products as cream, eggs, cheese, and poultry. The Land O'Lakes Creamery has been active in assisting its members in raising their standards of operation. It has been successful in establishing grades for butter and in elevating the general average of the quality of butter produced by its members. On the basis of this success, the organization has been able to secure a higher price for its top quality butter marketed under the Land O'Lakes brand. The brand name has been advertised widely to consumers and has been established as a standard of high quality.

Another outstanding cooperative venture is the California Fruit Growers' Exchange which at the present time markets the bulk of the California citrus-fruit crop. The Exchange maintains selling offices in all large cities so that it controls the entire concentration process in the distribution of California citrus fruits from the individual growers' orchards to wholesale markets in every large city. The Exchange has spent millions of dollars in advertising its brand name, Sunkist.

Limitations of Cooperative Marketing. It should be pointed out that many cooperatives have failed. Studies undertaken by the United States Department of Agriculture indicate that the main

reasons for frequent failure include the following: inefficient management, insufficient working capital, and lack of member interest. Cooperatives have failed as business enterprises because they have been poorly managed. But the success of cooperative marketing in handling agricultural products is of greater interest than the failures. The limitations when understood can be overcome.

To be successful, a cooperative organization must fulfill vital economic functions. It must operate at least as efficiently as the private marketing organization it attempts to replace. To secure this efficiency, it must have the same financial strength and wise management that any private-business enterprise requires. Particularly in the difficult early years of the organization, it must have staunch membership loyalty. If these limitations are understood and satisfied, recent history indicates clearly that cooperative marketing has a significant contribution to make to the orderly distribution of farm products.

NATURAL PRODUCTS

Natural products may be defined as goods supplied by nature without the assistance of man. This classification includes land, minerals, forest products, and animal life. It should be observed that for most of these products there is one continuous supply characteristic, namely, that the supply is limited. The supply of minerals is drawn down with every year of their use. The supply of forest products can be replaced only over long periods of time.

A second characteristic of the supply of natural products is that there are relatively few producers and that most producers operate large economic units. The comparison is striking when we consider the large number of small producers engaged in agriculture. There are less than 200 iron-ore mines producing in the United States, and one-fifth of the number produce four-fifths of the entire output of iron ore. This is characteristic of ownership conditions for many minerals.

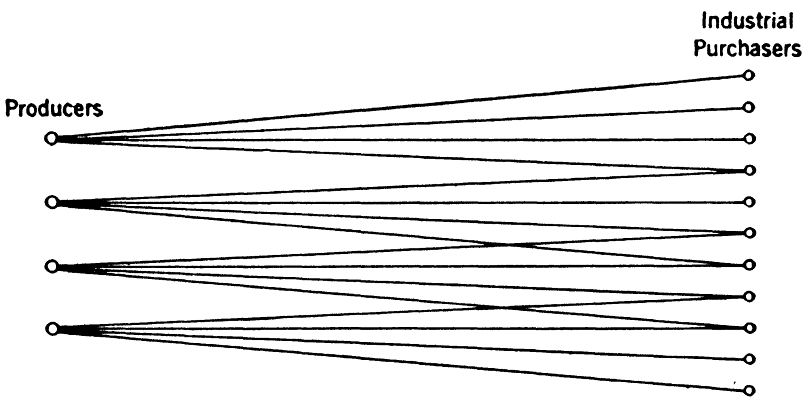
A third characteristic of the supply is that it may be controlled at the will of the producer. The operator of a copper mine turns out as much copper ore as he wishes. In a year of low prices he is free to stop ore production entirely. Not only can the supply be controlled in this way but the quality of the product is known in advance. This again contrasts sharply with the difficulties encountered in attempting to control the quality of farm products.

Essential Characteristics of Demand. Natural products for the most part serve as the raw materials of industry. Probably the most important demand characteristic is the importance of uniform quality. Automatic machinery requires uniform raw materials. Any departure from established quality standards may cause a breakdown of machinery with attendant costs for repair and idle time.

Serving as basic raw materials for industry, natural products must be available at all times exactly when demanded. Any failure of supply forces either a slowing of operations or a complete

CHART 28

TYPICAL MARKETING STRUCTURE FOR NATURAL PRODUCTS USED AS RAW MATERIALS OF INDUSTRY



stoppage, and consequent failure by the factory to satisfy the demands of its customers. It is a characteristic of the demand for natural products, therefore, that precautions be taken to guarantee a steady supply of raw materials as required. This places a heavy burden on transportation facilities. Many of the vital raw materials for American industry are produced at a distance from manufacturing centers, and are expensive to transport because of their bulk.

Another characteristic of the demand for natural products is its rapid fluctuation which reflects the effects of the business cycle. Factories purchase raw materials when their managers see an opportunity to sell finished products at profitable prices. In periods of business depression the demand for natural products used as raw materials falls away very sharply. Between 1929 and 1933 the

demand for copper declined by almost 70 per cent. In the same period the demand for iron declined by over 50 per cent. This is typical of fluctuation in the demand for natural products and again offers a notable contrast to the steady demand for agricultural products used as food.

Distribution Channels. Because of the character of the supply of natural products and the character of the demand for natural products, distribution channels differ sharply from channels used in marketing agricultural products.

In the marketing of natural products we do not observe the process of concentration and dispersion, which is the characteristic marketing structure for farm products. It should be noted that both suppliers and consumers of natural products operate large economic units. When natural products enter the marketing process from the hands of a few large-scale producers, there is no need for concentrating the output of a series of producers. Transportation and storage facilities can be utilized on an efficient scale by individual producers. Nor do large producers require the immediate financial aid of cash purchase by middlemen.

At the other end of the marketing process, large-scale purchasers prefer to deal directly with original producers because they buy in sufficiently large quantities to secure wholesale prices. The preference for direct dealing with original producers is strengthened by the desire to erect guarantees against any failure of supply. This desire is so strong, indeed, that in many cases large industrial producers attempt to guarantee raw-material supply by direct ownership of supply sources. They have attempted to integrate manufacturing with the control of raw materials. Large steel companies often own iron ore and coal mines and control many of the transportation agencies necessary to move these natural products from production sources to factories. Large paper manufacturers own their own forest reserves. Copper-smelting companies own smelting mines. Many oil refineries own pipe lines, tank cars, and tank ships; and in some cases extend their ownership to petroleum wells.

The marketing process for natural products used as raw materials is largely one of direct sale by producers to purchasers. In marketing agricultural products an intricate system of middlemen is necessary to carry out the complicated concentration and dispersion structure. In marketing natural products few such middlemen are

found. Large-scale producers for the most part sell direct to large-scale purchasers. Trade channels are relatively simple and integration of manufacturing and ownership of raw-material supply is common.

QUESTIONS, PROBLEMS, PROJECTS

A

1. Draw a broad distinction between farm products and natural products in terms of conditions of their supply.
2. Why is the farmer's financial position usually weak?
3. Why do farm products often incur high transportation charges?
4. Name the major characteristics of the demand for farm products used as food.
5. What is the significance of the country-wide location of the consumer market and the growth of large cities as the concentrated consumer markets?
6. Why is *concentration* of farm products necessary before they can be *dispersed?*
7. What are some important terminal markets for wheat?
8. Why are concentrating markets desirable in the marketing of cotton? Where are some of these central markets located?
9. Summarize the functions of central markets.
10. In what respects do agricultural marketing cooperatives differ from private marketing enterprises?
11. Upon what does the success of a cooperative marketing organization rest?
12. In what fields have marketing cooperatives been most successful? Least successful?
13. What are the chief causes of failure of marketing cooperatives?
14. Define and give examples of natural products.
15. In what field does the chief demand for natural products lie?
16. What is the difference between the marketing of natural products used as raw materials and the marketing of agricultural products?

B

1. What are the legitimate functions of middlemen in marketing farm products? Is there any more efficient way these services might be done?
2. Since the agricultural market is highly competitive and there are few controls over the amount produced, are prices likely to be higher or lower than prices for industrial products? Explain. What bearing, if any, does this have on such programs as that of the AAA?
3. By using the trade name, Sunkist, the California Fruit Growers' marketing cooperative was able to establish a heavy demand for a certain kind of orange and thus markedly increase the profits of those growers. Do you think it would be desirable to spread this use of trade names to all classes of agricultural products? Explain your answer.
4. Since changes in demand for food products are negligible, what will surely be the result of an overabundant crop? Does this justify the crop-restriction program of the government or is there a better solution? Might not extensive

advertising along the lines suggested in question 3 solve the problem by increasing demand?

5. Compare generally the need for marketing agencies in the case of agricultural products used as food, in the case of agricultural products used as raw materials, and in the case of natural products used as raw materials. In which fields are they most needed and why?
6. Argue either pro or con on the question of the extension of marketing cooperatives in the field of agricultural products to be used as food. Give the arguments for either side.
7. A farmer's purchasing power depends upon the market prices of his products. Because of the highly competitive nature of the agricultural market and the fact that there is no effective control of supply, market prices for agricultural products often fall far below market prices for industrial products, thus effectively removing farmers from the market for industrial products. How may this disparity of prices best be corrected? By the extension of cooperatives? By governmental crop restriction? By lowering prices for industrial products?

C

1. Write a brief history of the development of agricultural marketing cooperatives in the United States.
2. Indicate on an outline map the important terminal markets for five agricultural products of the United States.
3. Write a paper describing the various programs farmers have devised to restrict supply and increase demand for their agricultural products, thus boosting prices.
4. Evaluate these schemes from the standpoint of society as a whole. Will they benefit the public generally? Will they benefit the farmers in the long run?

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CHAPTER 19

WHOLESALE TRADE

In this chapter we shall consider the functions and the organization of intermediary or wholesale trade. This division of marketing includes all middlemen and all marketing activities between manufacturers and retail stores. Discussion of wholesale trade must include a description of problems which arise in selecting channels of distribution.

We have already observed that although the normal or othodox channel of distribution passes title to merchandise in sequence from manufacturer to wholesaler to retailer to consumer, all goods are not marketed in this way. Several middlemen may take part in the marketing process. Often a producer seeks a short cut to retailers, which eliminates one or more of the intermediary agents. The variety of distribution patterns from producers to retailers suggests that one of the most important and difficult problems confronting a manufacturer is that of selecting a suitable channel of distribution for his merchandise. A wise decision must be founded on a thorough knowledge of the functions performed by wholesale middlemen and the cost of performing those functions.

FUNCTIONS OF THE WHOLESALER

The wholesale middleman occupies a position midway between the manufacturer and the retailer. He is not a producer of merchandise; neither does he sell direct to consumers. All of his operations center around the purchase of merchandise in large lots from manufacturers or from concentrators of merchandise moving from agricultural sources and the sale of that merchandise in smaller lots to other middlemen or to retailers.

At first glance, therefore, it is apparent that wholesale middlemen perform several important jobs in the marketing process. They buy in large quantities and they sell in smaller quantities. One of their functions is that of breaking up merchandise units for further distribution. In making this distribution possible, they also assist in transporting and in storing merchandise. As sources of supply for retailers, they maintain inventories from which deliveries are

made. As we shall observe when the functions of the wholesaler are described in detail, the wholesale middleman assists in financing part of the distributive process, and, by reason of his central position in marketing, he is an important source of market information for both manufacturers and retailers. Perhaps the best way to grasp quickly and clearly the significant position occupied by wholesale middlemen in the marketing process is to describe in detail the characteristic services they perform for manufacturers and for retailers.

Wholesaler's Services for Manufacturers. The most important single service performed for the manufacturer by the wholesaler is that of selling his product. It is through the wholesaler's warehouse and as a result of the efforts of his sales force that the manufacturer's merchandise moves to retail stores. The typical service wholesaler maintains a staff of salesmen who call regularly on retailers to secure orders for the merchandise manufactured by hundreds of different producers located in various parts of the country. In the performance of this selling function the wholesaler represents many manufacturers. A wholesaler of grocery products stocks and sells merchandise produced by hundreds of manufacturers. He carries in stock a range of merchandise diversified enough to supply most of the demands of most of his retail customers. Similarly, a wholesaler of drug products stocks and sells a list of products of sufficient variety to satisfy the demands of most retail druggists. So, too, in other lines of wholesale business.

The significance of the wholesaler's performance of this selling function for manufacturers may be readily grasped when it is noted that without the wholesaler's intervention each manufacturer would have to sell direct to retail stores by means of his own sales force. When we consider the thousands of small independent retail stores selling all types of convenience merchandise it is not difficult to understand the problems that might arise if the producers of all merchandise sold in grocery stores and drugstores endeavored to market their products direct to their retail customers.

The task of maintaining contact with so many scattered retail outlets would be both difficult and expensive. Most small retailers place unit orders of very limited size. In many cases in the grocery and drug business, orders may amount to less than $5.00. The expense of soliciting orders by personal representation would be so great as to add substantially to the costs of marketing these

products. There would be serious delay in making deliveries since every order would have to be forwarded by the manufacturer's salesman to the factory, the merchandise assembled, and then shipped to the retail store.

It is apparent after only a brief examination of the marketing problems involved that direct sale by manufacturers to retailers of convenience merchandise may involve higher marketing costs than sale through wholesalers. The wholesaler secures economies not available to the manufacturer because he sells many products to the same retailer. A canner of tomatoes attempting to sell direct to retail grocers would send out salesmen to take orders only for his product. The orders secured in any single store would be limited to a few dollars worth of canned tomatoes. The wholesale grocer would send his salesmen to the same store, offering hundreds of grocery products, orders for all of which could be taken at the same time. The sum of the salesman's salary and traveling expenses measured against the sales that may be made, in the first case by the manufacturer's salesman handling one product, and in the second case by the wholesaler's salesman handling hundreds of products, clearly marks the economies to be secured by selling through wholesalers.

Transportation and Storage. We have already observed that transportation is less expensive when merchandise can be moved in unbroken carload lots from source of production to point of sale. By selling through wholesalers the manufacturer is able to ship carload quantities from his factory to the wholesaler's warehouse. Distribution in case lots may then be made from the warehouse to individual retail stores. The wholesaler's intervention in the marketing process makes possible economies in transportation expenses. This is readily apparent when we consider the alternative procedure which would be forced upon the manufacturer if he attempted to sell direct to retail stores. Small orders would be shipped from factory to store at relatively higher transportation costs.

Allied to the transportation economies are further savings in storage expense and improvements in retail customer service, which are secured by reason of the wholesaler's performance of the storage function. Most retailers prefer to buy merchandise in small quantities. They must offer their customers a wide variety of goods from which to choose, and, since they are rarely strongly financed,

their investment in merchandise must be spread very thin over hundreds of products. The retailer can maintain lean stocks and at the same time serve his customers satisfactorily only if he can rely upon quick shipments to replace merchandise which has been sold. If every shipment of merchandise had to move from a manufacturer's plant to a retail store, it would be impossible to offer retailers quick delivery on fill-in orders. Such service is possible only if in every large trading center wholesalers maintain inventories of merchandise ready for overnight delivery to retail stores.

Again, if we consider the problems that would be encountered by the manufacturer attempting to sell direct to retail stores, the value of the functions performed by the wholesale middleman becomes obvious. The manufacturer would have to maintain stocks of merchandise in warehouses scattered throughout his selling area, from which deliveries might be made quickly to customers. This extension of the storage burden would be very expensive. It would also involve the manufacturer in unusually heavy investment in dead inventory. This would be true, particularly, in the case of a product with seasonal fluctuations in sales. During part of the year the manufacturer might be forced to pay for storage space in excess of his current needs, while at other periods in the year he might find it very difficult to maintain stocks sufficient to serve retail customers. The wholesaler uses his warehouse to store hundreds of products. He can vary his inventories in direct proportion to customer's demand, and he can balance a seasonal decline in the sales of one product against seasonal increase in the sales of another.

Financing. The wholesale middleman performs a valuable financing function for the manufacturer. Few retailers are in a position to pay cash for the merchandise they buy. Sellers must extend credit for periods of from 10 to 60 or 90 days. During this credit period retailers hope to resell their merchandise to consumers and to use the cash receipts to reimburse their creditors.

The manufacturer might extend the necessary credit to retailers. In doing so, however, he would be called upon to accumulate and maintain credit information for thousands of small retail accounts. The bookkeeping task alone would involve a substantial outlay. Much of the information necessary to the shrewd appraisal of the desirability of extending credit to a retailer would not be readily

available to the manufacturer. Particularly for very small retail stores, this credit information can be secured only through day-to-day contact with retailers. It is clear that for the manufacturer selling direct to small retail accounts, the problems, expenses, and risks accumulated in extending credit would all be of serious proportions.

As performed by the wholesale middleman, the financing function becomes relatively simple. Whereas the manufacturer selling direct must account for small unit sales of his single product, the wholesaler enters on his books relatively large unit purchases of hundreds of products. The wholesaler is in a better position to appraise the credit standing of his customers because he is closer to them and because his salesmen call upon them frequently. By assuming the financing function for the manufacturer, the wholesaler reduces the manufacturer's accounting, office, and shipping expenses and diminishes the credit risk. He substitutes a single account, his own, for hundreds of accounts which might otherwise have to be assumed.

Risk Assumption. The wholesale middleman performs a further service for the manufacturer by assuming the burden of those risks which are inevitably attached to the ownership of merchandise. The wholesaler buys merchandise from manufacturers. From that point on in the marketing process he bears the risks of price fluctuations, style changes, and merchandise deterioration and spoilage. In addition, by buying in advance of consumer purchase he relieves the manufacturer of at least part of the risk attached to production in advance of sale. We have already pointed out that the wholesaler, by assuming the burden of financing his retail customers, also relieves the manufacturer of part of the risk of extending credit.

WHOLESALER'S SERVICES TO THE RETAILER

Occupying a central position in marketing, the activities of the wholesale middleman really point in two directions. He serves the manufacturer in ways described in the preceding paragraphs. He also serves retailers by performing for them a number of functions which they would otherwise have to perform themselves or would have to ask manufacturers to perform for them.

Purchasing. The wholesaler serves as a selling agent for manufacturers. He also serves as a buying agent for retailers. The

most significant aspect of the wholesaler's operations is his assembly of merchandise from hundreds of scattered producers. In the absence of wholesalers, each individual grocer, each individual druggist, and each individual hardware dealer would have to maintain connections with hundreds of producers, and spend a great deal of time talking to their salesmen and corresponding with their head offices. Inasmuch as most small retailers must be active in store management and customer service, this manufacturer contact would soon become a serious burden. The wholesaler eliminates most of this problem of manufacturer contact. The retail grocer deals with one or two wholesalers rather than with hundreds of manufacturers. The retail druggist, the retail hardware dealer simplify their buying in the same way.

The retailer secures other buying services from his wholesale supplier. Since all manufacturing and selling operations must to some extent anticipate consumer demand, the wholesaler assumes part of the risks which are attached to any attempt to anticipate future demand. Wholesalers are often in a better position to anticipate future demand than are retailers. They maintain contacts with hundreds of retail stores in different types of communities. They can coordinate information received from various sources and interpret this information in the light of trends in demand. Their ability to coordinate information from scattered sources is assisted by contacts with hundreds of manufacturers.

Information about future trends in consumer demand is especially significant in the sale of merchandise for which style has some importance. But even in the sale of staples, such as grocery and drug products, the wholesaler's central position may enable him to assist his customers with information about price developments or about new products introduced successfully in other areas.

The following statistical observations reinforce the observation that the wholesaler performs a valuable function for the retailer by serving as his buying agent. In the United States there are more than 50,000 manufacturers of food and related products; more than 20,000 manufacturers of merchandise sold in hardware stores; and more than 8000 manufacturers of products typically sold in drugstores. A single drugstore may carry a stock of as many as 12,000 different products, a single hardware store may carry in stock as many as 6000 different products, and a single

grocery store may stock anywhere from 1000 to 3000 different products. To serve this intricate web of manufacturer-retailer relationships, the average wholesale grocer may carry in stock from 10,000 to 20,000 different products, while the average drug wholesaler may maintain an inventory of from 45,000 to 60,000 different products.

Transportation and Storage. The services of the wholesaler in providing transportation and storage assistance to the manufacturers of the merchandise he handles are duplicated for his retail customers. The saving in transportation costs which result from carlot shipments to distribution centers near retail stores are shared by retailers through lower merchandise costs. The retailer secures further benefits from rapid delivery of merchandise to his store. This is made possible by the wholesaler's service of assembling merchandise from many producers and maintaining warehouse stocks ample to satisfy the needs of his retail customers. The significance of the storage function as performed by wholesale middlemen must not be minimized. Deprived of local storage stocks of merchandise, retailers would be compelled to enlarge their own inventories. This would necessitate increased investment in merchandise. It would contribute to higher costs of retailing and it would increase the risks assumed by retailers. It would be a special burden on the smaller store, the operation of which is rarely backed by sufficient cash to permit speculation in merchandise beyond the immediate demands of customers.

Financing. The wholesaler aids the retailer by extending credit. Through this operation the retailer is given an opportunity to sell his merchandise and utilize part of the cash so secured to pay his debts. Not all retailers require this extension of credit. Inasmuch as both manufacturers and wholesalers offer discounts for immediate payment of bills, it is to the retailer's advantage to make payments to his suppliers within the cash discount period if he can possibly do so. Larger retail stores almost invariably take advantage of cash discounts. But the cash reserve of the bulk of the small stores of this country is so slight that they would undoubtedly be forced out of business if it were not for the extension of financial assistance through a lengthened credit period. In considering the credit position of small retail stores it should also be observed that many retailers undoubtedly receive credit from wholesalers, which they would be unable to secure from

manufacturers. The operators of small retail stores are not in a position to establish themselves as good financial risks. In many cases a distant manufacturer would have little information on the basis of which he could determine the desirability of granting credit. Because of the frequent contacts of his salesmen, the local wholesaler is in a much better position to appraise the intangible factors which make up so much of the evidence for the extension of credit. The wholesaler knows the character of operators of small retail stores. He knows that in many cases willingness to pay merchandise debts is of greater significance than the cold measure of ability to pay debts as indicated by current financial standing.

Risk Assumption. Some risks are inevitably attached to the ownership of merchandise and the merchant cannot escape them. As the previous discussion has indicated, however, the services performed for the retailer by his wholesale supply house decrease the burden of risks for the retailer. By storing merchandise the wholesaler assumes part of the burden of the risks of merchandise spoilage and deterioration, style change, and price decline. If the retailer were forced to increase his merchandise investment, the risks of ownership would increase in the same proportion. The wholesaler also aids in the burden of risk assumption by offering merchandising advice to retailers. His central position in the marketing structure enables him to coordinate information from manufacturers, other middlemen, and retailers, and to offer suggestions based largely upon conclusions reached from information secured from these sources.

The merchandise assistance which a wholesale salesman may offer a retail customer is often very helpful. The salesman may suggest merchandise items which are being sold successfully in other stores. He may remind the retailer to feature seasonal merchandise at a time when customer buying habits make profitable sales opportunities. He may assist the retailer in rearranging store layout or in setting up displays and window trims, again transferring ideas for layouts and displays which he has observed in other stores.

The conclusion may be ventured that if wholesalers were eliminated, costs of operating small retail stores would be substantially increased. It must be remembered that the elimination of the wholesaler would not be accompanied by the elimination of

wholesale functions. The functions and services normally performed by wholesalers would have to be assumed by manufacturers and retailers. There is little reason to believe that this shift in the performance of basic wholesale functions would be accompanied by any greater efficiency. In many instances, indeed, the wholesaler can perform these functions more efficiently than any other marketing agency. The transfer of functions would then involve an increase in total marketing costs.

TYPES OF WHOLESALE MIDDLEMEN

A number of different types of wholesale middlemen and wholesale agencies are engaged in trade. They differ from one another in the functions they perform, in the types of merchandise they handle, in the area they serve, and in the scale of their operations. The most important distinction for our purposes, however, may well be that which is based upon the functions performed.

Basic Classification of Wholesalers. Analysis of wholesale trade, as carried out by the Census of Business, indicates that approximately 50 per cent of all manufactured goods destined for sale in retail stores is handled by wholesale middlemen. The bulk of the merchandise handled by wholesale middlemen is purchased from manufacturers and sold to retailers by the service wholesaler. This is a type of wholesale agent who performs all of the normal wholesale functions. The service wholesaler buys merchandise in large lots and resells it in smaller units, performs the storage function, maintains a sales force which calls upon retailers, extends credit, and makes deliveries. The service wholesaler is the most important type of wholesale merchant.

In recent years, however, other types of wholesale middlemen have been expanding their operations. The new types of middlemen are often referred to, in a group, as "limited-service wholesalers." These wholesale middlemen eliminate certain of the functions normally performed by the service wholesaler. The cash-and-carry wholesaler, as his title suggests, sells to retailers, but does not extend credit or deliver merchandise. His retail customers must pay cash for all purchases and must assume the costs of transporting merchandise from the wholesaler's warehouse to their stores. The mail-order wholesaler does not maintain a sales force calling personally on retailers, but issues a catalogue

from which retailers may make merchandise selections and send in orders by mail. Another type of limited-service wholesaler is known as a "drop shipper." This wholesale agent does not perform the storage function. He secures orders for merchandise from retailers and forwards the orders to manufacturers who ship merchandise direct to retail stores.

Because of their elimination of normal wholesale services, limited-service wholesalers of all types are able to effect reductions in operating costs. It should be observed, nevertheless, that this elimination of services and reduction of costs for wholesalers do not necessarily make marketing operations more efficient. The limited-service wholesaler forces manufacturers and retailers to assume part of the burden of performing the basic wholesale functions. Only if manufacturers and retailers can perform these functions more efficiently will there be a net reduction of marketing costs in the area of wholesale trade.

Significance of Limited-service Wholesalers. Although there has been a rapid growth in recent years of the several varieties of limited-service wholesalers, this type of wholesale middleman still plays a relatively insignificant part in wholesale trade. The dominant type of wholesale middleman is still the full-service wholesaler. In a few lines of business, however, notably in the distribution of food, drugs, and tobacco, the operation of limited-service wholesalers has grown with unusual rapidity. It is interesting to observe that the full-service wholesaler has not idly observed the growth of competition. In many instances service wholesalers have attempted to meet the new competition by opening limited-service departments. They have offered to sell to those retailers who express preference for the elimination of some services on a cash-and-carry basis, by mail, or on a drop-shipment basis. Retailers who purchase in the limited-service departments expect, of course, to secure the same merchandise at lower prices which reflect the elimination of some services.

SELECTING WHOLESALE DISTRIBUTION CHANNELS

A more serious problem for the service wholesaler has been the tendency for manufacturers to experiment with direct sale to retailers. This development, often referred to as direct marketing, may be traced to several causes. One of these is certainly the belief held by some manufacturers that they can perform the

wholesale functions more efficiently if they sell direct to retailers. In large part, however, many of the experiments in direct marketing may be traced to general dissatisfaction on the part of manufacturers with the performance of the normal wholesale functions.

Many manufacturers have complained that wholesalers are unwilling to maintain adequate storage stocks of merchandise. They claim that wholesalers do not perform the storage function in a satisfactory manner. As a result, retailers are often unable to secure rapid delivery of merchandise from wholesalers. Some manufacturers complain that the wholesaler's sales force is content to take orders, but does not sell merchandise aggressively. These manufacturers point out that many types of merchandise require aggressive sales promotion. The retailer must be urged to display merchandise on his counters, on his selling floor, and in his windows. The wholesaler's salesman does not take the time to secure adequate display. New merchandise items must be introduced in retail stores for the first time. This usually requires aggressive selling pressure to convince the retailer that he should stock the merchandise. Yet wholesaler's salesmen, it is charged, do not perform this service for new merchandise.

The Wholesaler's Defense. What reply can be made to these charges? Is the manufacturer's dissatisfaction with the wholesaler's services justified? Insofar as the storage function is concerned we may simply observe that it is not good business for a wholesaler to be out of stock of merchandise which his retail customers want. Such a failure on his part may induce retailers to transfer their trade to other wholesale houses. It is true, however, that wholesalers consciously attempt to avoid overinvestment in merchandise inventory. They attempt to maintain stocks of merchandise adequate for the needs of their customers, but not greatly in excess of those needs. This policy can be traced to the desire to avoid the assumption of unduly great risks of ownership. A sharp fall in the general price level would present very serious problems to any wholesaler maintaining unusually large stocks of merchandise. He would find the value of his investment in goods shrinking daily. If the price fall continued he might be forced out of business. He undertakes, therefore, to apply principles of merchandise control to the operation of his warehouse so as to reduce merchandise stocks to safe minimum levels.

The reply to the charge that wholesalers do not sell merchandise,

but simply accept orders from retailers, is usually stated in the following terms. Wholesale merchants carry stocks of thousands of different items in order to satisfy the needs of their retail customers. The salesman representing a grocery wholesaler or a drug wholesaler must, therefore, be prepared to fill orders for a wide variety of merchandise items when he calls upon his retail accounts. Time does not permit him to devote more than a few minutes to the discussion of the merits or the display of any single merchandise item. In this sense it is true that wholesalers' salesmen are order takers rather than aggressive sales promoters. For aggressive sales promotion it is to the manufacturer's interest to utilize his own sales force rather than rely upon the wholesaler's sales force.

Special Selling Devices. Following this line of reasoning, many manufacturers who normally sell through wholesalers often resort to direct selling when they desire unusually aggressive sales promotion. In introducing a new product, a manufacturer may employ a missionary sales force to call upon retailers, describe the product and its merits, and urge them to stock it. Future orders are handled by the wholesaler's regular sales staff. When the manufacturer of an established product, normally sold through wholesalers, desires special pressure for display to coordinate with a seasonal advertising campaign, he may employ a similar missionary sales force to convince retailers of the desirability of building displays of merchandise. The use of a missionary sales force in this way supplements the normal functions of a wholesaler. It is based on the recognition that the wholesaler's task is that of supplying the day-to-day needs of his customers, and that the nature of his operations does not permit his sales force to act as a special promotion crew for a single manufacturer.

Product Characteristics. A manufacturer may decide to eliminate distribution through wholesalers for reasons other than dissatisfaction with wholesalers' services. The producer of a perishable grocery product such as a line of assorted cookies may reach the decision to sell direct to retail stores because of the importance of exercising close control over retailers' stocks of this product. If retailers overstock, the last units of the item sold to consumers may be stale. Customer dissatisfaction will be followed by a refusal to purchase that brand in the future. The resentment is likely to be attached to the manufacturer's brand name rather

than to the retailer who sold the merchandise. The customer is not likely to be aware of the retailer's mistake in purchasing a stock of merchandise in excess of the current needs of his customers.

In a situation like this it is of the utmost importance that the salesman calling on the retailer maintain close supervision over the retailer's stock of the perishable product, prevent the retailer from overbuying, and encourage him to place frequent repeat orders for small amounts. Because of the hundreds of products which have a claim on the salesman's attention, he cannot be expected to supervise the sales and stocks of a single product with the special attention which a perishable food requires. Furthermore, the product is marketed under the manufacturer's brand name. The wholesaler has other brands of cookies to sell and it is unlikely that either the wholesaler or his salesmen will be greatly concerned about the reputation of a single brand. In order to secure adequate protection for his merchandise and the required supervision of retail stocks, the manufacturer of a perishable food product may decide to sell direct to retail stroes through his own sales force. This decision may be reached without regard to comparative costs of selling direct and selling through wholesalers. Many manufacturers, indeed, who want to control distribution, to supervise retailer's stocks, and to secure special promotional displays, sell direct to retail stores even though this type of distribution is more expensive than sale through wholesalers.

Factors Influencing Selection of Distribution Channels. If this analysis of the selection of channels of distribution is extended in detail, a variety of factors may be noted all of which in one way or another influence a manufacturer in the selection of distribution channels. It has been observed that even within a single industry all manufacturers do not use uniform distribution channels. Some sell through wholesalers, others sell direct by means of their own sales force, and still another group of manufacturers may utilize both methods — selling direct to large retail purchasers and through wholesalers to small accounts. A single manufacturer may sell in one way in large cities and in another way in small towns and rural areas. The absence of uniformity is striking. The reasons often lie in contrasting interpretations of the significance of such factors as the following.

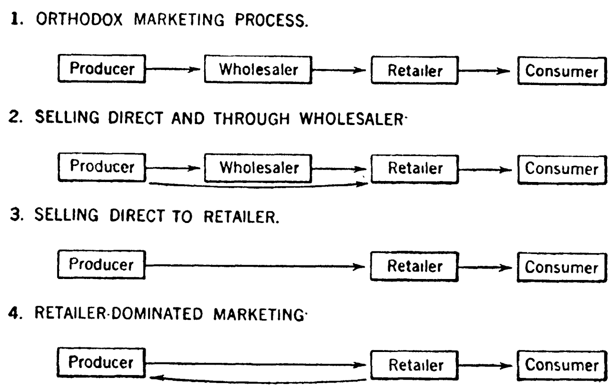
In selecting a channel of distribution a manufacturer usually considers first the nature of consumer demand for his product.

If consumers usually purchase it as convenience merchandise, he will attempt to secure retail distribution through as many stores as possible. If consumers purchase it as shopping merchandise, he may be content to secure retail distribution through a select group of retailers. If consumers purchase his product as specialty merchandise, he may distribute through a system of exclusive retailers.

Having determined the pattern of retail distribution necessary to serve adequately the buying habits of ultimate consumers, he will then consider how best to attain the desired system of retail

CHART 29

GENERAL TREND TOWARD DIRECT MARKETING



distribution. If he has selected exclusive retail agencies, he will probably decide to sell direct through his own sales force. In this way he can select retail outlets. Since exclusive retailers usually purchase in fairly substantial quantities and maintain close contacts with the manufacturers whose products they handle, the cost of direct marketing is not prohibitive.

If on the other hand the manufacturer decides that the best system of retail distribution involves representation in practically all stores which sell his type of merchandise, he will consider very carefully the several factors which may influence him to favor either direct-marketing methods, or wholesale distribution, or a split between these alternatives. A product which is sold in many retail stores, for which retailers are accustomed to place frequent repeat orders, expecting quick delivery, is usually sold more cheaply through wholesalers. On the other hand, a product with a high unit price, purchased infrequently by retailers, is often

sold direct by the manufacturer. If the product requires intensive selling in order to place it in retail stores and secure necessary display, the manufacturer will be influenced in favor of direct-marketing methods. On the contrary, a staple product, for which the retailer requires merely ready access to wholesaler's stocks and for which no special display and promotion are necessary, is well adapted to distribution through wholesalers.

The manufacturer may also consider such factors as the technical knowledge and skill necessary to sell, install, and service the product. If the retailer must have special training in order to sell the product, to install it, or to service it, the manufacturer may be tempted to sell direct, eliminating the wholesaler. Only in this way can he be certain that the retailer and his salesmen are carefully trained in desirable selling methods, and possess the skill necessary to install and service the product to the customer's satisfaction.

In short, the selection of channels of distribution and the decision to use wholesalers or to sell direct is the result of a careful consideration of a multiplicity of factors. Some products may, indeed, be sold direct to the retailer at a lower cost than through wholesalers. Many manufacturers undertake to sell direct even at a higher cost in order to secure desired control over retailers and their selling methods, to protect the product, or to utilize selling methods more aggressive than those usually offered by a wholesaler.

This analysis suggests that despite recent changes in the status of the service wholesaler, he should not be regarded as a middleman whose position in distribution is vanishing. The wholesaler performs a vital service in marketing products to small retail stores and in handling a wide line of merchandise which does not require special selling or special control. The wholesaler is indispensable in reaching small scattered retailers who purchase in small quantities. Direct sale to such retailers may involve prohibitive costs. The wholesaler's services are alone responsible for maintaining adequate distribution at reasonable expense.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What is the normal channel of distribution?
2. Name the important jobs in the marketing process which the wholesale middleman performs.

3. Why is this such an important service? Why could not the manufacturers themselves perform it?
4. Explain why retailers need credit and how wholesalers perform this function. Are manufacturers benefited?
5. How does the wholesaler simplify the retailer's problem of buying?
6. What kind of assistance can a wholesale salesman offer a retail customer?
7. Describe the functions performed by a service wholesaler. In what respects does he differ from the limited-service wholesaler, the cash-and-carry wholesaler, and the mail-order wholesaler?
8. In what kinds of business has the operation of limited-service wholesalers grown rapidly?
9. What answers have wholesalers made to criticism of their services?
10. In the case of a perishable product sold directly to retailers what must the salesmen guard against?
11. How will products which require special selling or special control be distributed?

B

1. Manufacturers of convenience goods obtain economies by distributing through wholesalers. Is this apt to be as true in the case of manufacturers of the so-called "shopping goods" and specialty goods? Explain.
2. Will the wholesaler's function of extending credit be more important in times of depression or in times of prosperity? Because of this function of extending credit what is apt to happen to wholesalers in times of sudden depression as in 1929? Explain. Draw an analogy to time-payment plans between retailers and consumers.
3. Why is information about future trends in consumer demand especially significant in the sale of merchandise for which style has some importance? Illustrate.
4. Name some fields in which retailers may buy directly from manufacturers without suffering any material inconvenience; some fields in which direct buying would be very inconvenient.
5. Why do many retailers undoubtedly receive credit from wholesalers which they would be unable to receive from manufacturers? Does it mean that wholesalers extend credit too freely, thus undermining their own security and encouraging inadequately financed retailers to remain in business? Explain fully.
6. What is the test of whether or not services should be performed by wholesalers rather than the manufacturers or retailers themselves?
7. Why does the limited-service wholesaler still play a relatively insignificant part in wholesale trade? What does this fact indicate about the inefficiency of the service wholesaler?
8. Name five types of merchandise that require aggressive sales promotion. How will they be distributed?
9. Give five examples of products for which there are frequent repeat orders requiring quick delivery, and which are sold through wholesalers. Give five examples of products which have high unit prices, which are purchased infrequently, and which are often sold directly to retailers.

C

1. Itemize 10 expenditures for goods which you have made in the last week. Trace the marketing process for each.
2. Write a history of wholesaling in the United States. How has its development been affected by improvements in manufacturing techniques?

SUGGESTED READING

Beckman, T. N., and N. H. Engle, *Wholesaling*, The Ronald Press Company, New York, 1937.

Phillips, C. F., *Marketing*, Houghton Mifflin Company, Boston, 1938, Chaps. IX–XI.

CHAPTER 20

RETAIL TRADE

Of all the divisions of the marketing structure, the one most familiar to consumers is retail trade. Beginning with their earliest contacts with neighborhood stores, consumers soon acquire familiarity with all types of retail enterprises. They understand the outward appearance and functioning of independent stores and chain stores, of single-line stores handling only one type of merchandise, and of department stores which include in their merchandise stocks the complete range of consumers' goods. But consumers know little about the interior organization of retail stores or about the competitive relations between independent stores and chain stores. They do not always understand clearly the costs of the services provided by retail stores or the share of retail prices which can be traced to the provision of such services as convenient location, attractive decoration, helpful sales people, merchandise display, credit, and delivery. It is to the examination of such problems as these that this chapter will be devoted.

How is retail trade organized? What functions are performed by retail stores? What are the costs of operating retail stores? What contributions to retailing have been made by the great chain organizations which operate units in most American communities? What is the source of the competitive struggle between independents and chains? Some understanding of the answers to these questions is necessary for a comprehensive understanding of the relation of retailing to the structure of the marketing system and to the American economy as a whole.

The first examination of retail trade quickly reveals that this division of marketing is made up of an infinite variety of stores. The merchandise, the appearance, the managerial policy, and the services vary from store to store. The entire structure of retailing presents a picture of dynamic economic units constantly changing, constantly adapting, constantly forced to compete with new types of retail enterprise. Here is the final stage of a long series of activities which extends back through the area of wholesale trade to mass-production factories and even beyond the factories to the

initial sources of raw materials. Most consumers' goods find their way into the hands of individuals by means of the retail-trade structure. The efficient functioning of retailing is, therefore, a significant element in the successful operation of the entire economy. The destruction of the system of retail trade, which has grown up in this country, would force untold hardships upon consumers.

HISTORICAL DEVELOPMENT OF RETAILING

The first retail institutions in any new country are likely to be rudimentary in character. One of the earliest retailers, who quickly became a familiar character throughout the American colonies, was the Yankee peddler. The peddler carried his varied stock of merchandise from house to house. Serving as a kind of traveling store, he brought to many isolated farms the first contact with the growing range of consumers' goods which the factories of England and the smaller productive establishments on the Atlantic seaboard were making available.

Wherever communities began to develop — at country crossroads, along the rivers which furnished early transportation — general stores were opened. In these stores were sold manufactured goods of all kinds. Much of the merchandise was not sold for cash, because cash was lacking in the small frontier communities. The stores served as barter agencies, exchanging manufactured goods for such farm products as butter, tallow candles, home-woven textiles, and furs. So important did the early general stores become that many writers have observed that the village general store really functioned as the focus of social life for its community, the center of both merchandise and news, and a debating room for the exchange of opinion.

Not long after urban communities began to grow in size, the general store encountered new competition in the limited-line store, which specialized in selling a single type of merchandise such as dry goods, groceries, or pharmaceuticals. Because of the wide range of merchandise it carries the general store can exist profitably in a very small community. The limited-line store requires the purchasing power of a larger population. It must find sufficient demand to earn profits through the sale of a single type of merchandise. Despite this fact, the rapid growth of communities in the eastern part of the country made possible as early

as 1850 the successful establishment of a number of specializing limited-line stores. At the present time there are more than 100 different kinds of limited-line stores tabulated by the Census of Distribution.

Recent Developments. In the latter half of the nineteenth century new types of retail stores were opened. One of the first and most important of these inventions in retailing was the department store. In this store all types of merchandise were brought together under a single roof, as in the old country general store. But the department store also borrowed from the limited-line store. Its merchandise was organized in separate departments, each of which was managed as a distinct division of the business. Thus, the department store inherits both from the general store and the limited-line store. This type of retail institution experienced a rapid growth between 1880 and 1920. In the larger cities at the present time the great department stores are usually recognized as the outstanding retailing enterprises. In the last two decades, however, the rate of growth has slowed. Few new department stores have been opened, and many of the older stores have experienced difficulty in retaining their share of retail business.

During the same period the first chain-store organizations were also undertaken. In these organizations many scattered units were combined under centralized management with authority and control focusing at the main office and the retail units following the orders laid down by central regulation. Chain-store development has moved ahead both in the single-line type of chain-store unit (grocery chains and drug chains) and in the multiline type of unit handling wide varieties of merchandise. The chain-store type of organization has even entered the department-store field. There are now chains of department stores, each unit of which sells almost all types of merchandise.

The growth of larger retail units, whether single stores or chains, has initiated a struggle for dominance of the marketing structure. We have already observed how the position of the wholesaler in distribution has been threatened by the efforts of manufacturers to extend control over the marketing of their products. At the other end of the marketing structure, large-scale retailers have been endeavoring to extend their control back through the marketing structure, attacking the wholesaler's position from another ap-

proach. Some writers have observed that there is a manufacturer-retailer contest for dominance of the marketing of consumer goods. Retailers have developed their own brands of merchandise. They have insisted on purchasing direct from manufacturers, circumventing wholesalers. Some of the largest retail organizations have already begun to control the manufacture of products sold in their retail stores.

STATISTICAL SURVEY OF RETAIL TRADE

Until the first Census of Distribution in 1929 a complete statistical picture of the organization of retail trade was not available. The first Census of Distribution in 1929 was followed by the Retail Census of 1933 and the third Retail Census in 1935. Reports of the 1939 census have only recently become available. They provide an interesting contrast with earlier data of the years 1929 and 1935.

In 1939 total sales of retail stores in the United States were slightly in excess of 42 billion dollars. This sales volume was divided between independently owned retail stores, which accounted for almost 75 per cent of all retail trade, chain stores, which accounted for almost 22 per cent of retail trade, and a few unimportant types of retail institutions not included in either of these headings in the reports of the Bureau of the Census. Although the relation of independent stores and chain stores in the share of retail sales volume was roughly in the ratio of 3 to 1, in terms of the number of stores operated the independents outnumbered the chains 13 to 1. They accounted for approximately 92 per cent of all retail stores. This discrepancy may be explained in terms of the size of the average chain unit and the average independent unit. The average chain store had annual sales of almost $75,000 in 1939, whereas the average annual sales volume for independent stores was less than $20,000. The census figures include among their listings of independent stores many small retail stores which reduce the size of the average annual sales of all independent stores.

It is interesting to observe changes in the relative significance in independent and chain-store units. The greatest growth in the number and size of chain-store organizations occurred in the decade 1920 to 1929. In the latter year chain stores handled approximately 20 per cent of all retail trade. This increased to

more than 23 per cent in 1935 and fell again to slightly less than 22 per cent in 1939. It is apparent that the decade of rapid growth in chain-store significance has been followed by a decade of relative stability. Some of the causes for the failure to continue the rate of growth of the 1920's will be discussed later in this chapter.

Employment. In 1939 more than 6,200,000 persons were employed in retail trade. Of this number, independents gave employment to almost 5,000,000 individuals including more than 1,600,000 proprietors of independent stores. These figures do not, of course, include the many unpaid family employees who work long hours in small retail stores, but who are not listed as employees regularly receiving compensation. Chain-store organizations employed more than 1,200,000 persons, almost 800,000 of whom were full-time employees and the rest part-time. The total retail pay-roll, excluding the compensation of proprietors of independent stores was in excess of 4½ billion dollars.

Classification by Types of Business. Chain organizations now account for somewhat more than one-fifth of all retail sales, although they include only 7 per cent of the store units. The relative significance of chain stores varies in different types of retail enterprise. Chain-store organizations occupy the strongest position in the variety-store business (the 5-, 10-, 25-, and 50-cent stores). Chain-store organizations in 1939 accounted for almost 87 per cent of all the sales volume in the variety-store field. For no other type of business, however, did chain organizations claim as much as 50 per cent of total sales. Among the kinds of retail business in which the chain stores occupy an important position may be listed the following: shoe stores, in which the chain stores accounted for slightly less than 50 per cent of total sales; accessory, tire, and battery dealers, in which the chain organizations accounted for 45 per cent of total sales; dairy-product stores, in which the chain organizations accounted for a little over 40 per cent of total sales; and combination grocery and meat stores, in which the chain organizations accounted for approximately 38 per cent of total sales.

If we examine the relative significance of chain and independent competition by geographic divisions of the United States, we observe that the region of chain-store concentration which stands out above all others is the east north-central part of the country.

The Bureau of the Census observes in its report of retail trade that two states, New York and Pennsylvania, each have more than 10,000 chain stores. Chain-store concentration appears to follow population concentration. Rural areas and those regions distinguished for an absence of large cities are generally areas of independent-store operation where the chains secure a relatively insignificant share of the retail business. Regions where large cities abound, areas of manufacturing concentration, are generally areas where chain stores cluster. This observation may be related to the earlier comment on the relative size of the average chain unit and the average independent unit.

SMALL-SCALE RETAILING

It is now clear that despite the recent growth of chain stores 75 per cent of all retail trade continues to be handled by independently owned stores. Most of these stores are small in size. The heart of the retail business of the United States, therefore, is carried on by retail units of limited sales volume in small-size stores with selling staffs composed of not more than two or three individuals in addition to the proprietor. Some of these stores are still classified as general stores. Those general stores which still exist, however, are for the most part located in rural areas. The growth of shopping centers, the building of better roads, and widespread ownership of automobiles have all been responsible for the transfer of the bulk of consumer purchasing to larger shopping centers. Here small independent stores are usually single-line stores specializing in the sale of one type merchandise. A discussion of small scale retailing may well be confined to a discussion of single-line stores. What is the competitive position of such stores? What are the sources of their strength as retail institutions? What are their weaknesses?

Characteristics of Independent Single-line Stores. The typical independent single-line store is actively managed by the individual who has invested his money in the enterprise. Members of his family often work in the store during busy hours. Most of these stores offer a number of services to their customers, including credit and delivery. Many of these stores handle such convenience merchandise as grocery, drug, and hardware products, and these outlets are often located away from the central retail-

shopping district. They may be described as neighborhood stores. On the other hand, there are many independent single-line stores selling shopping goods such as men's and women's clothing. These stores are likely to seek locations in the center of retail-shopping districts.

Competitive Position of Small Stores. It is often alleged that independent small stores occupy a weak competitive position with respect to both large independent outlets, such as the big department stores, and chain-store organizations. How can the small independent grocery store compete with the local unit operated by the Great Atlantic and Pacific Tea Company? How can the independently-owned neighborhood druggist compete effectively with a local unit of a large drug chain? The fact that the small store has continued to be the typical retail outlet of the United States suggests that whatever obvious disadvantages it possesses, it must have significant sources of strength.

Probably the most important single factor maintaining the competitive position of the independent retailer is his personal interest in the business. He meets his customers every day. He is in a position to discover quickly and accurately their buying habits and their merchandise preferences. Furthermore, he is part of the same social circle in which his customers move. This is, of course, particularly true in smaller cities and towns. A personal relationship is built up between the retailer and his customers, which may be the source of loyalty on their part. Many of his customers purchase in his store because they know him, like him, and trust him.

Because the small store is independently owned and managed, it has greater flexibility in operation than a unit of a chain organization. Delivery and credit may be readily adjusted to local conditions. Store hours are easily fitted into the pattern of store hours maintained in other retail outlets in the community. The cooperation of the owner in charitable campaigns is easily secured. Special merchandise required for the peculiarities of local consumer demand may be purchased on the sole authority of the owner of the store. All of these contribute to flexibility in operation, which often enables the small retailer to adapt his enterprise to the requirements of his customers more effectively than can be done by the local unit of a chain-store organization.

A further source of strength for the small store lies in the close

relationship which exists between owner and employees. The owner is in daily contact with the people who work for him. Relations are not on the formal basis of a large organization. There is mutual trust and respect, and innovations and adaptations readily follow his suggestions. Many of the benefits of this close relationship are passed on to customers who appreciate and enjoy the informal atmosphere in which they purchase their merchandise. In such a situation the employees may take a closer interest in the operation of the enterprise than would be shown by the employees of a chain organization.

The owner of a small store has the further advantage of direct supervision of his own investment. If the business profits, the gain is entirely his. If losses result from operation, he must bear the entire risk. As a result, he has a closer interest in the daily conduct of the business than is usually demonstrated by most chain-store managers.

Disadvantages of the Small Store. Certain obvious disadvantages are attached to the operation of small retail stores. Because of the limitation of its scale of operations, the small store can not purchase merchandise in as large quantities as can either the large store or the chain organization. Buying in small quantities, the small retailer is usually forced to pay a somewhat higher price for his merchandise. In many cases he must buy from wholesalers, whereas large retailers usually buy direct from manufacturers and secure added economies through their combination of wholesale and retail functions. Another disadvantage for the small store lies in the fact that employees must occupy themselves with a wide variety of tasks within the store. The owner and manager is concerned with buying merchandise, setting retail prices, supervising customer relations, preparing advertising material, building displays, examining the accounts, and even sharing in the burden of waiting on customers. Because he must know something about everything in his store, he may fail to be expert in the performance of any single activity. In larger organizations the scale of the business permits specialization of executive direction. One man occupies himself solely with buying merchandise. Another is concerned solely with preparing advertising material. A third specializes in training and hiring employees. Through such specialization of executive personnel, the larger units can employ experts, each of whom can do his particular job better

than the same function can be performed by the nonspecializing small retailer.

But perhaps the two greatest disadvantages of small-store operators lie in still another area. The first is lack of managerial skill; the second, lack of financial strength. Studies of the mortality of independent stores in the retail field reveal that there is a very rapid withdrawal from business each year. The annual withdrawal may amount to as much as one-third of all stores in business. The mortality rate varies from one type of retail enterprise to another, but it is high for practically all types of small retail stores. It has been observed that most retail failures can be traced to the two factors of inefficient management and lack of adequate capital.

Managerial inefficiency may be revealed by mistakes in purchasing merchandise, laxness in extending credit, ignorance of sound accounting methods, ineffective advertising, and improper training of sales people. Many small merchants possess limited understanding of accounting techniques and often remain in business several years without discovering whether their stores are operating at a profit or a loss.

Despite the high mortality rate, there is a widespread belief that little skill is required to operate a small grocery, a small restaurant, a small garage, or a small drugstore and that not a great amount of capital is necessary. Many such enterprises are opened without sufficient capital to support the difficult first two or three years during which sales are increasing, customer good will is being established, and the position of the business in the community is being made secure.

DEPARTMENT STORES

The term "department store" is usually applied to a large store which sells a wide variety of merchandise, organized in a number of departments which are separately managed and are supervised under individual accounting systems. The range of merchandise commonly sold in department stores includes all types of men's, women's, and children's clothing; home furnishings; dry goods; kitchen wares; and appliances. Department stores often carry other types of merchandise and most department stores offer consumers a number of services for which no extra charge is made. Among these services may be listed credit, delivery, sale on ap-

proval, return privileges, rest rooms, information bureaus, and shopping assistance. Department stores are the main outlets for that class of consumer goods which we have termed "shopping goods." For this reason this type of store usually seeks a location in the main retail-shopping district near other department stores and single-line stores handling shopping goods.

Organization. In the larger department store the administrative organization usually applies the principles of administrative specialization. One common type of organization divides all store activities into four groups of which the first is headed by the merchandise manager, the second by the advertising manager, the third by the store manager, and the fourth by the treasurer or controller. Reporting to the merchandising manager are the various departmental managers, who are usually called "buyers." Each department is a unit, handling a single type of merchandise. Accounting records are maintained on a departmental basis and the manager of each department is judged by the profit reported for his division.

The advertising manager supervises all the promotional work of the store. Under him is the staff of the advertising division, some members of which specialize in writing copy while others are artists who prepare illustrations. Also responsible to the advertising manager is the display division which is in charge of preparing window and interior displays of merchandise.

The store manager heads a division which usually includes the personnel department, in charge of hiring, training, and supervising the employees; the store maintenance division; and the department responsible for handling merchandise from its first arrival in the store to its final delivery to customers. The treasurer or controller directs all the financial and accounting work of the store.

The degree of specialization varies with the size of the store. In a small department store the advertising manager may write all advertising copy himself and also build merchandise displays. In the larger store his work usually is limited to supervision over the activities of his subordinates. In the small department store the merchandise manager may be occupied with actually purchasing goods to be sold in the store. In the larger department store the merchandise manager becomes a director or supervisor of the work of the departmental managers.

Costs of Operation. Department stores experienced a rapid growth in the United States up to the middle of the 1920's. Since then they have maintained a stable competitive position, although a rising expense rate has pressed upon their profit margin to such an extent that many department-store executives have become seriously worried about the future of department stores.

The problem of rising expenses is perhaps the central management difficulty. Department stores are the most expensive retail institutions. The cost of operating a department store, which includes such items as rent, employees' salaries, taxes, delivery expenses, and similar items, often runs as high as from 34 to 36 per cent of sales. As much as 36 cents out of every dollar spent by consumers in stores of this type may be required to pay the expenses of operating the store. This compares with an expense rate of from 20 to 22 per cent of sales incurred by service grocery stores and with an expense rate of from 10 to 12 per cent of sales incurred by self-service supermarkets. To a large extent the high cost of operating department stores can be traced to such factors as multiplicity of services, location in high-rent central shopping districts, the varieties of merchandise handled, and the cost of the attractive exterior and interior decoration.

Managerial experience indicates that in addition to the high level of the expense rate executives must deal with its rigidity. Department stores experience serious difficulties in periods of business depression. A general fall in the price level reduces the dollar income secured from the sale of merchandise. It is very difficult, however, to reduce expenses. Many expense items are fixed, while those that are not absolutely determined can be reduced only slightly. As a result, in recent years the department store has faced severe competition from other retail outlets.

Variety chain-store organizations, most of which began as stores selling only 5- and 10-cent merchandise, have been extending their price range. Several of the variety chains have experimented in the sale of merchandise priced as high as $1.00. In this price range they have been able for the first time to sell merchandise formerly carried only in department stores or in small single-line stores. Competition has become increasingly severe in the sale of such merchandise as inexpensive kitchen wares, children's clothing, and household supplies. In the effort to meet this new competition department-store executives have experi-

mented with certain innovations in store organization. To meet the threat of declining retail sales traced to the growth of suburban shopping districts in the regions about some of the larger cities they have taken other measures. Three important competitive developments for department stores will be briefly described here: (1) the ownership group; (2) the department-store chain; and (3) the suburban branch store.

The Ownership Group. The ownership group affiliates under common ownership a number of independent department stores located in different cities. The ownership group may be compared to the organization of a holding company with central financial control. In the ownership-group type of organization, however, little effort has been made to achieve any marked centralization of management. Individual stores continue to function as independent organizations joined only by a loose financial control. Such stores usually maintain their own names and their own individuality. As a result of the failure to centralize management the ownership-group type of organization has contributed very slightly to reduction in operating expenses.

The Department-store Chain. The department-store chain moves one step beyond the ownership group. In the department-store chain centralized financial control is accompanied by centralized management control. One buyer at chain headquarters may purchase a line of merchandise for all stores in the chain. An advertising staff at chain headquarters prepares promotional material for all stores. Control of prices is largely centralized, as is control over most of the other retail functions. As a result, department-store chains have been able to effect substantial reductions in operating expenses.

In addition to economies which may be traced to centralized control, units in chain organizations have benefited from their location in smaller cities and towns in which store-operating costs are naturally somewhat lower than in the larger cities. Department-store chains also eliminate many of the services customarily offered to consumers by independent department stores and stores affiliated with ownership groups. Frequently they limit credit and delivery. Often they spend less money on store decoration. In many cases they eliminate entirely a number of other services which usually have been offered by most department stores. Chain department stores in many cases have confined their atten-

tion to merchandise at lower prices than has been characteristic of independent department stores.

Competitive Position. The strength of the department store's position in retail trade may be traced to its offer of a wide variety of merchandise and services under a single roof. It is a convenient place in which to shop. In the larger cities important department stores have established the prestige of their names and consumers have become accustomed to the convenience of buying in such institutions and have ignored the cost of the services which they regard as free. Compared with the smallest single-line stores the larger department stores may possess certain buying advantages traceable to quantity purchasing. This point should not be overemphasized, however, inasmuch as the advantages of quantity purchasing are limited by the size of individual departments within each store. The store as a whole may be large while the division selling men's shirts may be rather small. Thus, the true economies of quantity buying are rather attached to the department-store chain as a result of centralized buying for each type of merchandise throughout the entire organization.

CHAIN STORES

A chain-store organization is usually defined as a group of four or more units centrally owned and centrally managed. The range of chain-store organization is suggested by the fact that while a small grocery organization consisting of but five stores centrally owned and centrally managed is regarded as a chain organization, so, too, is the nation-wide system of the Great Atlantic and Pacific Tea Company operating more than 11,000 retail units.

The most significant aspect of chain organization is the centralization of authority for all store functions. All buying is performed at staff headquarters. All advertising material is prepared at headquarters. Store layouts and store displays are planned at headquarters. Control over merchandise prices is centralized. Store managers have little freedom over their operations. They supervise the sale of merchandise purchased centrally. They follow advertising, display, and price instructions issued by the central office. Their task is largely one of executing policies centrally determined. The benefits of this type of organization may be traced in lower costs of operation and in expert adminis-

tration of every retail function. Because the central-office executives plan for hundreds or thousands of retail outlets, the burden of their salaries is allocated to many stores. They receive high salaries as experts in their jobs, while the cost for the performance of that function in each store remains relatively small.

Competitive Advantages. The competitive advantages of the chain type of organization may be summarized in the following way: (1) economies secured from quantity purchasing; (2) efficiency secured from centralized brain power; (3) economies secured from combination of wholesale and retail functions. Centralized purchase of merchandise for all outlets in a chain organization makes possible buying on a very large scale with all the economies attached thereto. The significance of this source of advantage for chain stores may be overemphasized, however, as may the significance of centralized administration of store functions. There is no doubt that both contribute to the strength of the chain store's competitive position, but it is easy to overlook the importance of the combination of wholesale and retail functions. Chain stores purchase directly from manufacturers. As a result, they are forced to perform the major wholesale functions. These functions include storage and distribution in small lots from warehouses to retail stores. The elimination of the wholesaler's sales force, order-taking, and extension of credit make a substantial contribution to low distribution costs.

The foundation of the chain store's appeal to consumers may be discovered in the combination of its competitive advantages. From their earliest history chain stores have emphasized low prices. In recent years price disparities between chain-store merchandise and independent merchandise have narrowed, but the chain store retains in the minds of most customers a reputation for selling at low prices. During the period of their greatest growth chain stores made a further appeal to customers through their inauguration of more efficient merchandising methods. They maintained more attractive retail stores than did many independents. They were leaders in scientific display of merchandise, and they were responsible for substituting attractive packages and containers for bulk containers of merchandise.

In recent years new types of retail institutions, of which the self-service supermarket is outstanding, have seriously weakened the chain store's competitive advantage. The elimination of all

services in the supermarket type of institution makes possible a reduction of operating costs below even the levels attained by chain stores. Supermarket merchandising has generally been confined to the distribution of grocery and related products. Some writers have observed a tendency to widen the varieties of merchandise sold on the self-service supermarket principle.

MAIL-ORDER RETAILING

Retailing by mail originated in the last quarter of the nineteenth century. This type of retailing experienced a rapid growth during the following decades. Mail-order concerns sold the bulk of their merchandise to farmers and residents of small towns who found in the catalogues of mail-order houses a more satisfactory selection of merchandise than was offered by local retail stores. The buying power of mail-order concerns enabled them to offer merchandise at low price, and they made every effort to minimize the normal difficulties of selecting merchandise from the printed page.

Recent Developments. Mail-order retailing suffers from certain obvious handicaps. Widespread ownership of automobiles and the construction of hard surface roads have given farmers easy access to important retail trading centers. Merchandise can be attractively displayed in retail stores, and most consumers prefer to inspect the goods they plan to buy. Deliveries can be made more quickly from retail stores, and installation and repair service often exercise a significant influence over the decision to purchase. Finally, the printed page is a weaker selling force than the oral arguments and the physical demonstrations of personal salesmanship.

The two leading mail-order concerns, Sears, Roebuck and Company and Montgomery Ward and Company, recognized the unfavorable future outlook for mail-order selling in the 1920's. They endeavored to recapture lost business and secure new sales volume by opening retail stores. Operating as chain organizations, they have multiplied their retail outlets, seeking locations in smaller cities and towns and in many of the country's largest cities. They still maintain a substantial volume of mail-order sales but they have also assumed a leading position in the operation of department-store chains.

INDEPENDENT-CHAIN-STORE COMPETITION

As might have been expected, the growth of chain stores in the 1920's was followed by resentment of chain-store practices. Independent merchants faced with this new competition felt themselves ill-equipped to cope with it and attacked the chains in the effort to weaken their competitive position.

Propaganda. At first the independents' attack upon chain organizations was limited to the spreading of antichain-store propaganda. A number of charges were hurled at the chain organizations to discredit them among consumers. It was alleged that chain stores used unfair practices in pricing, sold inferior merchandise, and cheated their customers. It was suggested that chain stores were monopolistic in character and tended to destroy competition among local retail stores. The rumor was spread that chain stores forced their employees to work long hours and by their rigid control of employee practices put pressure on clerks to cheat customers. The charge was also brought forward that chain stores took money out of the local community by draining off profits to distant financial centers. Some of these charges were obviously false, some were partially true, and many were misunderstood. Regardless of the accuracy of the statements, however, a number of the accusations were accepted by consumers and the public relations of chain organizations sank to a very low level.

Taxation. Unsuccessful in driving chain organizations out of business by means of this propaganda attack, independent merchants next turned to taxation. Working through their trade associations, and aided by wholesalers whose future success in business depended directly on the success of independent merchants, small-scale retailers were successful in inducing the passage in a number of states of tax measures levied specifically against chain organizations. Such taxation devices became particularly attractive to voters during the depression years following 1930 when other sources of state income were drying up while expenses were increasing. In several states chain-store taxes reached levels high enough to force chain organizations to close many of their outlets. In other states, however, taxes were maintained at more moderate levels and the chains continued to operate.

Other Legislation. The third stage of the independents' attack upon the chain stores was also legislative in character. Alleging that much of the chain store's advantage could be traced to unfair pricing practices, particularly in the use of "loss leaders," independent retailers and wholesalers forced through in a series of states legislation permitting the fixing of retail prices. These state laws were widely known as "Fair Trade Acts." Fair-trade legislation permitted a manufacturer to contract with a retailer to fix the minimum resale price of his merchandise. Such fair-trade contracts became binding upon all retailers in the state.

Price fixing was strongly supported by the independent merchants and opposed by chain organizations. Not all merchandise was price-fixed, however. Contracts were generally confined to drug products, cosmetics, books, and liquor. Inasmuch as the legislation was voluntary in character and no manufacturer was compelled to fix the resale price of his merchandise, in many areas there was little or no price fixing.

The absence of retail price fixing was particularly marked in the grocery business. Disappointed in their efforts to secure price fixing of grocery products, independent wholesale and retail grocers were in the vanguard of those who supported another type of state price fixing legislation widely known as "Unfair Practices Acts." This legislation transferred price control from the voluntary to the mandatory stage. It placed a floor under all retail prices, providing that no retailer could sell any merchandise for less than the cost of the merchandise plus a specified mark-up per cent, which in many states was set at 6 per cent over cost.

Adapting Chain Organization Techniques. These attempts to check the growth of chain-store organizations and to weaken their competitive position have centered chiefly on efforts to handicap the chains and force them out of business. Many critics have observed that this has not been the wisest approach on the part of the independent merchant. It appears to overlook the fact that the chief source of chain-store advantage has been the combination of wholesale and retail functions rather than economies in purchasing and concentration of executive talents. Following this suggested line of procedure, in recent years some independent retailers have focused their attention upon efforts to secure for themselves many of the advantages which are derived from the chain type of organization. These attempts have become widely known as

efforts to secure wholesale-retail cooperation or as "voluntary chains."

The Voluntary Chain. The voluntary-chain type of organization is founded on a cooperative effort leading to the centralized organization of a group of similar retail stores which remain under independent ownership. A number of independent retail grocers, for example, may agree to concentrate all their purchases with a single wholesaler. In return for this agreement, the wholesaler expresses his willingness to offer certain services to his retail customers. Among these services may be included store-management counsel, assistance in setting up uniform accounting records, advice in planning store layouts and merchandise displays, and instruction in the organization of stock-control systems. In addition, the wholesaler may provide his retail customers with a line of private-brand merchandise sold only in the cooperating stores of the group. In some cases voluntary chains have adopted uniform store fronts for all member stores and have agreed to advertise cooperatively in newspapers, offering to customers each week the same advertised special merchandise at uniform prices.

The chief purpose of the voluntary chain is to secure for the independent merchant many of the advantages of the chain type of organization, while retaining independent ownership and personal supervision of retail activities by the man who has invested his money in the store. The retailer is aided in improving his management policies; he benefits from the advice of the wholesaler's consultant in store management, and from the cooperative pool of information concerning management practices available through the reports of other member stores. The establishment of private-brand merchandise frees the merchant from much of the impact of price competition on widely advertised brands sold in other stores.

The wholesaler also benefits from the voluntary type of organization. He secures a guaranteed group of customers and possibly even increased sales as a result of the agreement to concentrate purchases. It may be possible for the wholesaler not only to maintain his position as a distributor of merchandise, but also to operate more efficiently with consequent benefit to his profits.

The most rapid development of the voluntary chain organization has been in the grocery business. A moderate growth has been observed in the dry-goods, drug, and hardware business. The

greatest handicap so far encountered has been the lack of strong centralized control. Despite this inherent weakness, it is widely believed that the voluntary chain is the most effective competitive weapon yet discovered by the independent merchant.

QUESTIONS, PROBLEMS, PROJECTS

A

1. Name one of the earliest retailers, who was familiar in the American colonies.
2. What is the limited-line store? Why and when did it come into existence?
3. What are its characteristics?
4. How does the development of large retail chain organizations affect manufacturers?
5. What is the ratio of total retail sales made in independent stores to total retail sales made in chain stores?
6. Of the 6,200,000 persons employed in retail trade in 1939 how many were employed in independent stores? How many in chain stores?
7. What is the region of chain-store concentration in the United States?
8. What are some characteristics of independent single-line stores? What kinds of goods do they usually sell?
9. How high is the mortality rate for small stores? What two factors account chiefly for the large number of failures?
10. What are some of the services which department stores offer to their customers?
11. Why do department stores' expenses run as high as 34 to 36 per cent of sales?
12. Describe the ownership group and the department-store chain. How do they differ?
13. Describe chain-store organization.
14. What are the benefits of chain organization?
15. What is the chain stores' chief appeal to customers?

B

1. Why did the greatest growth in chain-store organizations occur in the decade 1920 to 1929?
2. Can you explain why chain stores occupy their strongest position in the variety-store business?
3. Are there any reasons why the region of chain-store concentration is the east north-central part of the United States? What are they?
4. Comment on the following statement. The strength of the small retail stores lies in the fact that their owners are also their managers, hence, they discharge their responsibilities to themselves, to their employers, and to the public as well, thus cultivating very valuable consumer good will.
5. If the statement in question 4 is accurate, how may large corporate retailing organizations strengthen their position as competitors with smaller units, such as the neighborhood store?
6. It is said that one of the disadvantages of a small store is the lack of specialization and division of labor of the employees. Where else in our study of the business world have we encountered a similar lack of specialization? In

what areas of economic activity have we observed great specialization and division of labor?

7. Can you account for the rise in the expense rate of department stores?
8. Looking at the problem solely from the public's point of view, can we afford to let department stores be cut out by so-called "cutthroat competition"? Or, on the other hand, can we permit the department store to exist in our private-enterprise system if it consistently fails to meet the test of efficiency imposed by free-price competition?
9. Is it desirable for chain department stores to concentrate their efforts on underselling independent department stores?
10. What are the motives behind the attacks on chain stores? Are they designed to further public interests or private interests? Are the attackers primarily interested in performing their responsibilities to themselves or to the public?
11. What economic groups are behind the attempts to restrict chain-store competition? Do you think this kind of legislation indicates a flaw in our government by showing clearly that many laws are passed to further private rather than public interests? Why?
12. In light of our traditional free-enterprise notions that supply and demand relationships should control prices, what must we say about retail price-fixing schemes?
13. Do you think that the development of the voluntary chain type of organization is desirable? Why?
14. Is there really such a thing as cutthroat price competition? What is it? When does it occur? How do you distinguish it from fair competition?

C

1. Write a paper comparing the development of the various kinds of retailing units with the development of the various kinds of manufacturing units. How did they affect each other?
2. Prepare an essay presenting either the arguments for the chain store and its development or the arguments against it.
3. List all the chain stores that operate in your home area. What products do they sell?
4. List the products which you think may best be sold in independent small stores, in independent department stores, and in chain stores.
5. Discover if there are any statutes restricting chain-store activity in your state, or if there is an Unfair Practices Act. How effectively do they operate?

SUGGESTED READING

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PART FIVE

FINANCE

In primitive economic organizations, production and distribution were carried on by a system of barter. As economic organizations became more complex, barter proved a clumsy and ineffective way to transact business, and money was invented. In the modern economy, money transactions accompany commodity transactions. Beginning as an adjunct to the business system, the financial structure has become part of the integrated web of all economic activity. Problems of finance are encountered by business men and by consumers, by private industry and by divisions of the government. The modern business system could not function without its intricate organization of financial relationships. No survey of the business world would be either satisfactory or complete without a description of the operation of the financial system, types of financial instruments, and important financial problems.

Part V begins with a discussion of capital demand and supply; why business enterprise requires financial aid and how and in what volume that aid is made available. There follow two chapters dealing with long-term and short-term financing. The final chapter is devoted to a discussion of problems of financing government.

CHAPTER 21

CAPITAL DEMAND AND SUPPLY

The business demand for capital is derived from the necessity for investing money before the receipt of income. Expenditures precede returns. Money is advanced in the expectation of a profitable return. This sequence is the source of both the greatest business risks and the major problems of capital demand and supply.

There is no standard or uniform demand for capital. In the case of a manufacturing enterprise we can distinguish between at least two major classifications of capital demand. Money is needed to finance the erection of a factory building and the purchase of machinery. This may be called a demand for long-term financing, for the building and machinery will be utilized during many years and are expected to return a profit on the investment only after 10, 20, 30 years, or longer. Money is also needed to finance the purchase of raw materials and semifinished parts, and to meet the weekly pay roll. This may be called a "demand for short-term financing," for the manufacturing period is brief and goods made from raw materials and labor power purchased today will be paid for within a few months. A similar distinction between long-term and short-term demand may be drawn for almost every type of business.

The supply of capital shows a parallel division between long-term and short-term periods. Some types of investment are made with the knowledge that they will not be repaid for many years. Other types of investment are made in the expectation of quick repayment. The development of legal instruments and lending devices has followed the varying character of capital demand and supply.

With this understanding of the diversified character of capital demand and supply, we are in a position to pose and attempt to answer a number of questions. What is meant by the demand for capital? Why does business need capital? What types of capital are needed? How great is the demand for capital? Is the demand steady or does it vary? How does the demand for capital change

during the phases of the business cycle? And on the supply side: How is capital accumulated? Why is capital accumulated? What agencies supply capital to business? What part do the various financial institutions play in supplying capital? What relation exists between capital supply and business efficiency? These questions will be examined in some detail in this and the following chapters for both private business and government.

THE DEMAND FOR CAPITAL

Stated in the simplest terms, there is a demand for capital because money invested in plant, machinery, labor power, and merchandise yields a profit. This simple explanation suggests that the demand for capital is closely allied to the operation of the capitalistic system. Again reducing an intricate relationship to a simple statement, we may describe the capitalistic system as a system of "roundabout" production, in which factory buildings are erected and tools are purchased today to make commodities which the owners of this productive equipment expect to sell at a profit tomorrow.

The two significant elements are (1) expenditure before income, and (2) investment yields profits. In connection with the first, it is clear that money must be advanced to pay for the factory and tools, to pay labor's wages, and to buy materials and parts before (sometimes long before) the income from the sale of finished merchandise is available for repayment. In connection with the second, we may observe that no business man would invest money unless he expected to get back at some future time all that he had invested and more besides. Because these two significant elements extend throughout the capitalistic private-enterprise economy in which we live, there is a continuing demand for capital. The financial thread runs through the entire pattern of the business. It is discussed in diverse terms and under various names. Business men speak of capital, of finance, of credit. They are all essentially the same thing.

Capital Demand in Today's Economy. The demand for capital is greater now than at any time in the history of man. This is another of the many aspects of current economic organization which can be traced to the Industrial Revolution. Large-scale production with power-driven machines requires a greater investment of money than small-scale production with hand tools.

Every increase in the size of manufacturing and marketing units forces an increase in the size of capital commitments.

The village tailor, 100 years ago, needed only a few dollars worth of equipment and materials. He made a suit of clothes only after a customer had placed an order. He worked in a small shop, alone or with a few assistants. He had no stock of finished goods, no marketing organization, no problem of storing and transporting garments. The investment required was very small.

The manufacturer of men's clothing today conducts his operations in a large factory housing hundreds of specialized machines, giving employment to thousands of workers. He must purchase cloth, buttons, and thread in quantity. He must develop and maintain an elaborate marketing organization, purchase transportation facilities, lease warehouse space. He must maintain an inventory of finished garments from which shipments can be made to retailers. This entire organization for producing and distributing must be built and in large part paid for before any income is received from the sale of clothing. The capital investment required is thousands of times greater than that of the village tailor. A similar contrast may be developed in almost every field of business. Compare the capital investment necessary to operate an eighteenth-century carriage-maker's shop with the investment which must be made by an automobile manufacturer. Contrast the investment required to open a small country store with that required to found a metropolitan department store.

The inheritance of the Industrial Revolution justifies the belief that increases in the size of business units and in the minute subdivision of specialized activities make business more efficient. They also increase the demand for capital. Just as the nature of power production forced manufacturers to expand their scale of operations, hire workers, and seek out distant markets, so the increased demand for capital has forced business men to borrow from others to finance enterprises beyond the scope of their private savings. The Industrial Revolution transformed home production into factory production. It transformed local markets to regional, national, and international markets. It transformed the demand for capital from a small-scale private status to a large-scale public status. In finance, as in production and marketing, self-sufficiency broke down under the impact of rapid growth, and interdependency became the characteristic of the system.

Long-term and Short-term Demand. In analyzing the demand for capital we may employ a distinction utilized by business men, bankers, and accountants. They speak of "fixed capital" and of "liquid" or "working capital." By fixed capital they mean money invested in plant and machinery. This capital is "fixed" in the sense that plant and machinery are to be utilized in production for many years and their value is dissipated very slowly. They cannot readily be converted into cash. The term "liquid capital" is applied to the current assets of a business — cash, accounts receivable, and inventory — which are either held in the form of cash or are being converted into cash in the course of the day-to-day operations of the business.

This contrast in the speed with which fixed and liquid assets are converted into cash is a significant factor in analyzing the demand for capital. An enterprise requires financial assistance in purchasing and maintaining both types of assets. But the demand for long-term capital differs from the demand for short-term capital in (1) the length of time between investment and repayment, (2) the risk, and (3) the possibility of emergency conversion into cash.

The demand for capital to erect a building or to purchase machinery and equipment is a demand for money that cannot normally be repaid quickly. The usefulness of the assets is expected to extend well into the future. The value of the assets decreases slowly. Only a minute share of the cost of these assets can logically be charged against each unit of goods produced. The assets earn money slowly, and repayment out of earnings can be made only after many years. This contrasts with the demand for capital to purchase raw materials and parts, to extend credit to customers (that is, permit them to delay paying their bills), to pay workers, and to maintain a sum of ready cash for emergencies. Inventory is transformed into finished goods in the daily operation of the business; finished goods are sold to customers; accounts receivable are paid at regular intervals. The liquid or current assets of a business are being converted into cash at a regular rate during every business day.

The capital required to finance the investment in these assets is converted into cash within a short period (seldom in excess of three months) and the lender can expect repayment without delay.

A second distinction between long-term and short-term capital lies in the nature and the degree of the risk. Investment in plant

and machinery necessarily is based upon a long-range forecast of future business conditions. The manufacturer of men's clothing who plans an addition to his factory space does so in the expectation of utilizing the new building for a number of years. A shrewd business man does not invest in building and machinery if he is convinced that they can be utilized profitably for only a few months.[1] The measure of the risk involved in such long-range commitments is his ability accurately to forecast the future. Such forecasting may be attempted with assurance in a relatively stable public-utility industry, such as the telephone business; in the areas of competitive business, the chance of error is many times greater.

Capital investment in current assets assumes a lesser risk. Business conditions for the one- to three-month future may be appraised with reasonable confidence. There is always the possibility of loss as a result of an unexpected adverse price movement, but the long-term risk of investment in useless equipment is almost entirely removed.

A third distinction between long-term and short-term capital lies in the possibility of converting assets into cash in an unforeseen emergency. Liquid or current assets are being converted into cash in normal daily operations. Even at a forced sale, accounts receivable can be disposed of at no substantial reduction from face value and inventory is usually certain of a 50 per cent return. But plant and machinery have value only as operating units in the industry. Sold for scrap, they may bring less than 5 per cent of their worth to a going concern. Investment in fixed assets, therefore, represents "sunk" capital which cannot be translated into cash before the termination of their useful life, except at a serious loss.

THE NATURE OF CREDIT

In writing and conversation about business such statements as the following are common: "Credit is the lifeblood of business." "We live in a credit society." The clear suggestion of all such

[1] In this connection, note the unwillingness of many manufacturers to expand plant investment in 1940 and 1941 to provide space for handling army and defense contracts. The expansion of business was, they judged, temporary. Special-purpose plant and machinery would be required, not readily adaptable to normal peacetime production. Solutions were found either in direct government investment in needed plant (which transferred the risk from the business man), or in special permission to charge the cost of all such investment for defense contracts directly against the contracts. But this type of cost loading is not possible in private business.

comments is that credit is of outstanding significance in the modern economic system. As we extend our study of the relation of finance to the functioning of the economy, it will be difficult to avoid agreement with this conclusion. At this point in our discussion of the demand for capital it is therefore pertinent to inquire into the function of credit in the business world, and to outline the general relationship between credit and the demand for capital.

The basic or underlying assumption in all credit transactions is confidence, confidence that one to whom money is loaned or goods are sold will be able at the agreed time to repay the loan or meet his due bills for merchandise. Complementary to the essential confidence or trust, there appears the element of deferred payment: money is loaned today to be repaid at a future date; goods are sold today, with payment due at a future date. Credit is a current advance against a future payment, and credit will not be extended without confidence that future payment will be made.

Credit and the Demand for Capital. There is an immediately apparent relationship between credit and the demand for capital. The demand for capital may be compared to the total consumer demand for commodities. We have observed that consumer demand is limited by ability to purchase. We want many things we cannot afford. In the same manner, the demand for capital is limited by credit standing. The manager of a business enterprise may discern a legitimate need for money to invest in fixed or liquid assets. His ability to secure that capital is limited by the strength of the credit standing of his firm. Retailers will not sell to consumers who cannot pay for the goods they want. Investors will not make capital advances to enterprises whose credit standing is not strong enough to inspire confidence in their ability to make repayment.

The Basis of Credit. How, then, does a business establish its credit? What is the basis of credit rating? Is credit founded, as some have suggested, solely on property? Will capital be advanced only when ample security is offered? Or is credit based largely on confidence in the character of the applicant? Are potential lenders interested primarily in *ability* to pay debts or in *willingness* to pay debts?

Examination of a series of diversified credit transactions suggests that credit standing is founded on both property and character, on both the possessions of the borrower which may be pledged as

security for the loan and the reputation of the borrower for paying his debts. We are reminded of the observation of the elder Mr. J. P. Morgan that there were some men to whom he would not lend a nickel, regardless of the security they offered, while to others he would lend a million dollars at a moment's notice, without security or questions.

The tangible assets of a business or of an individual may be readily appraised as a basis for the extension of credit. Appraisal of the character of a borrower is more difficult. Prime factors in such an analysis are the borrower's record for probity and prompt repayment of past debts, his established reputation for business ability (including experience and past success in projected or related lines of business), and his personal habits insofar as they inspire confidence or distrust.

ADMINISTRATIVE PROBLEMS IN CAPITAL DEMAND

It is desirable to translate these general observations on capital demand and credit into the problems of financial administration faced by the business executive. Discussion of financial instruments will be deferred to the following chapters, but we may profitably examine here the management aspects of the demand for capital.

Administrative problems in capital demand may be divided into two broad classifications. The first is concerned with the financial problems of a new enterprise, the second with the financial problems of a going concern.

The Promoter. The financial administrative problems of the new business promoter — for whom the economists have reserved the term "entrepreneur" — are not always thoroughly understood. A promoter is the one who organizes a new business and puts it into operation. The organizing task includes the investigation of the project under consideration, the preparation of the operating plan, and the assembly of the financial backing required to start activity and keep the enterprise in business until it is self-supporting.

Administrative problems of a financial character begin with the initial investigation of the project. If the promoter is considering the business possibilities of a new invention, he will begin by checking patent rights and attempting to determine whether the invention offers a usable improvement over existing devices. Next, he will probably consider marketing problems, the existence of an

expressed or latent consumer demand, the number and location of potential purchasers, and channels of distribution available for moving the new product to ultimate purchasers. If he is reasonably confident that the product can be sold, he may then direct his investigation toward manufacturing problems. What production difficulties may be anticipated? What type of plant, raw materials, and machinery will be required? In what quantity? What about the need for specialized labor skills?

Preliminary Financial Plans. On the basis of this information, the promoter is in a position to draw up preliminary financial plans. Certain expenses have already been incurred, but these may be classified as investigation costs. The decision to proceed with manufacture and distribution sets in motion the accumulation of actual operating expenses which present a series of problems in the area of capital demand. How much money will be needed to finance the new enterprise? How large an investment in fixed capital will be necessary? How much liquid or working capital should be provided? How long will it be before the business earns sufficient returns to be independent of new capital supply?

The answers to these and related questions can be developed only after a thorough investigation of such problems as the following. How much will it cost to erect the required productive plant and equip it with machinery? Will it be possible to utilize an existing factory building? If so, where is there available space and at what price can it be purchased? What investment must be made in raw materials, parts, and supplies? What about the costs of assembling the human organization: executives, foremen, and skilled workers? What expenses of a service character must be incurred: legal and financial advice? What about the cost of insurance and taxes? How about marketing expenses: sales staff, advertising, demonstration, free samples?

Every cost item must be predetermined as accurately as possible. Inasmuch as many cost items will vary at different production levels, the attempt must be made to forecast the expected sales volume month by month and to set up expense budgets for several potential rates of production. Against monthly expenses must be balanced anticipated income from sales. This income itself must be appraised in terms of anticipated credit requirements of purchasers. Will they pay cash for merchandise upon delivery? Or will they demand extended credit, delaying payment for several

months? What increase in sales volume can be expected after the initial period? And most important of all, what is the "break-even point," that is, at what volume will income equal expenses and how soon will that volume be attained?

A complete financial plan for the enterprise can be drawn up on the basis of this information. Much of the material, it must be admitted, is derived from estimates. Much of it cannot be accurately forecasted. With whatever inaccuracies it may contain, it represents the best available advance prediction of the financial requirements of the projected enterprise and the only foundation for rational organization of its capital structure.

The financial plan, at this point, represents only a statement of the total demand for capital roughly divided into capital requirements for financing investment in plant and machinery and capital requirements for financing investment in current or liquid assets, both projected into the future and balanced against income for several accounting periods. There remains the task of translating this total capital demand into the detailed capital organization of the enterprise? How is the request for capital to be stated? In what terms is the demand to be expressed?

Expressing the Capital Demand. The demand for capital may be expressed as an invitation to become part owner of the new enterprise, or as an invitation to lend money to the business and take a position as a creditor. It is of the greatest importance that a clear distinction be established between these two positions. The invitation to share in the ownership says, in effect: by investing your money, you secure certain ownership and control rights, as specified in the contract; you place yourself in a position to participate in the direction of affairs; you will share in the distribution of profits, if profits there be, and you will share the burden of losses, if the enterprise falters. The invitation to become a creditor says, in effect: by investing your money, you take a position among the creditors of the business, in whatever sequence and with whatever security may be determined by the contract governing the transaction; you have no directing rights over the enterprise; the business owes you money and it agrees to make payments as specified in the contract, transferring specified sums of money at specified dates, regardless of profits, unless no money is available; in the event the business fails to make the agreed repayment of principal and interest, the contract covering the debt and the state through its

legal system give you certain rights upon which you may take action to recover as much as you can of what is owed to you.

Detailed description of the financial instruments involved in both ownership and creditor positions will be presented in the following chapters. At this point, let us indicate merely some of the administrative problems involved. Under what conditions is the demand for capital likely to be expressed as an invitation to share ownership? Under what conditions is it likely to be expressed as an invitation to assume the position of creditor?

If the business promises to be highly profitable, it is clearly advantageous to secure the bulk of the capital requirements by creditor relationships. Money for long-term investment may be borrowed at a relatively low interest rate. Profits may be earned at a rate substantially higher, and the small group of owners — the promoting unit — share all the surplus above the interest and repayment of principal due to creditors. Securing capital by offering shares in the ownership to potential investors would force the original promoting group to divide profits among all owners in direct proportion to capital investment.

If the enterprise is distinctly a risky venture, the plan for securing long-term capital by inducing investors to assume a creditor position is dangerous. If investors perceive the risks, they may be unwilling to lend money at a reasonable rate of interest. If loans are floated and the enterprise ends in failure, creditors may seize all the assets of the concern soon after interest payments halt. In situations of serious risk, it is often preferable to secure a large part of the necessary capital by sharing the ownership position. The risk of loss is spread. There are no claims against the enterprise for periodic payment of interest on outstanding debts. Owners share profits only when they are earned. The same argument favors capital demand expressed as an invitation to participate as owner in any enterprise for which a fluctuating income is anticipated. Capital demand expressed as an invitation to assume a creditor position is preferable when a stable income is anticipated. This is particularly true when the income is expected to be large enough to cover all payments of debt interest and principal and leave a substantial sum to be shared among the small group of owners.

Part of the demand for short-term capital will be satisfied by the contribution of the owners. When the enterprise has been well

established and has proved its earning capacity and stability, and when the managers have demonstrated their ability as business men, the demand for additional short-term capital to finance current operations will be directed toward the commercial banks. The demand will be expressed as an invitation to lend money, and, in this way, to assume a creditor position.

Capital Demand in the Going Concern. Financial administration of the going concern must deal with certain other problems. The initial investment of long-term capital may have been sufficient for the young concern's first years. Later growth will place a strain on both fixed and liquid assets and slowly create the need for capital additions. It may become necessary to enlarge the plant, erect new buildings, add to the supply of machines and tools. Concurrently, increased sales will call for more working capital to support larger inventories and increases in outstanding accounts receivable, as well as such augmented current expense items as the weekly labor pay roll.

Capital demand in the going concern stands on a firmer foundation than in the new enterprise. The business is established; its operations are a matter of record, available for consultation by investors, banks, business associates, and other prospective creditors. Its potential development may be appraised with greater assurance. It presents a history of accomplishment as the basis for requesting capital to support expansion.

Analysis of the amount of capital required and the exact way in which the demand will be framed (invitation to become owners or creditors, discrimination between long- and short-term investment, and the selection of the precise financial instruments) will be matters of administrative policy. The decision will be influenced by such factors as the earnings record of the enterprise (size of earnings in relation to invested capital, stability of earnings, response to business cycle, etc.), competition present and prospective, the immediate and long-term outlook for sales and profits, and current developments in the capital-supply market.

THE SUPPLY OF CAPITAL

The dynamic life of the capitalistic free-enterprise economy creates a constant demand for capital. The demand varies, mounting in periods of rising business activity, falling in periods of declining business activity. Even the most superficial review of

how the economy operates makes clear its vital and necessary dependence on the supply of capital. As the previous pages have suggested, the demand is not uniform. There is a demand for ownership participation and a demand for creditor participation. The creditor demand is itself split between long-term and short-term loans, subdivided by the precise definitions of the many financial instruments and relationships which will be described in the following chapters. How is this demand satisfied? What is the nature of the supply of capital? What are the sources of those capital funds which flow through the veins of the economic world?

The Origins of Capital. In any type of economy, from the most rudimentary to the most complex, the supply of capital depends on three conditions. First, there must be a surplus of current production over current consumption. This surplus may be secured by a continuance of consumption at the existing rate while stepping up the rate of production. Or it may be secured by deliberately curtailing consumption for a period. The manner in which the surplus is created is not important. Second, the surplus of current income, however created, must be saved. There must be a willingness to forego present use of the surplus. Third, the surplus must be invested in such a way as to add to the productive capacity of the economy.

For a simple illustration of capital formation in a rudimentary economy, consider the case of the Indian who supports his family by catching fish. Suppose that he is able to catch five fish daily by dandling a hook in the water from a position on the shore of a lake. The five fish are just sufficient to feed the family. The Indian believes that he could increase his daily catch if he had a canoe which could take him out into the lake where there were large fish and a more plentiful supply. But during the three days required to hollow out a log and fashion a usable boat, his family would starve. The only way in which the boat could be built would be through a voluntary reduction of the family's daily consumption of fish. The surplus fish might be saved and used to feed the family while the boat was built. The boat, representing a net addition to the family's supply of capital goods, could be used to aid in catching many times the previous day's supply of fish. Here is illustrated, in the simplest terms, the creation of a surplus, saving, and investment in productive equipment.

The process of capital accumulation remains essentially un-

changed in the modern business world. It is somewhat complicated by the use of money. The single effect traceable to the use of money as a medium of exchange is that the three conditions of capital accumulation become impersonal. One person may save and, through the monetary system, aid another to invest in capital goods. For the economy as a whole, total consumption of goods and services must be less than total production. A surplus is thus created, which may be invested in factories and machines capable of producing a net increase in the total future supply of goods and services. Through the medium of money, the savings (surplus) of one group may be loaned to others who want to invest in producers' goods.

You and I open savings accounts in the bank. We create a surplus, by refusing to spend all the money we earn. The bank lends the money to men who want capital to aid in expanding their businesses. Instead of keeping our money in the bank, we may decide to transfer it directly by purchasing securities offered for sale by business enterprises. In the modern economy, the surplus may be transferred from person to person by the exchange of money. Even in the complex modern economy we may discover an identity of saving and investing, without the intervention of money, in the case of the farmer who uses his leisure hours to improve the drainage system on his farm and so increase its productivity.

Sources of Savings. The creation of capital is the result of saving. An individual who spends his entire income cannot create a surplus. Neither can an economy in which, for a period at least, consumption is not reduced below production. The single exception to this generalization is the creation of short-term capital by the banking system. This departure from the broad rule of savings → surplus → investment → capital will be discussed below. Let us, for the present, accept the general statement of the significance of saving in the process of capital supply, and inquire into the sources of savings in the American economy.

The first important source of savings is the group of individuals who deposit money in banks, trust companies, building and loan associations, insurance companies, and similar institutions for the collection and protection of savings. Every addition to the total amount of money saved represents a voluntary reduction of consumption. Individuals who save curtail their spending. In

connection with this group of savers it is important to observe that capital is not created merely through the act of saving money. Money may be hoarded. Rather than being invested directly in business or placed in a financial institution for indirect investment, it may be hidden in a mattress or kept at home in a safe. Hoarding does not contribute to capital supply. Saving unaccompanied by investment does not contribute to capital supply.

A second important source of savings is the group of business enterprises which do not distribute all their profits, but retain part for reinvestment in the business. It has long been an established precept of conservative management to finance expansion out of earnings. When a business grows slowly, a reasonable share of past profits may suffice to provide for the bulk of current capital requirements. The larger corporations in the United States have followed the policy of withholding a substantial share of earnings from stockholders, and, as a result, have often become independent of outside sources of savings. Small enterprises rarely become self-financing.

A third important source of savings is the group of governmental bodies, local, state, and federal, which levy taxes and so impose upon business concerns and individuals a forced saving. To the extent that these governmental revenues are invested in the purchase or construction of productive assets, savings secured in this way contribute to the total national supply of capital goods.

The Commercial Bank and Short-term Capital. The single departure from the broad rule that savings are the basis of capital supply was noted above. The commercial banks have a limited power to create short-term capital funds. They may add to the supply of short-term capital, without savings, because cash on deposit in banks may serve as the basis for a substantially larger amount of loans to business men. When a business man borrows from his bank — that is, adds to the short-term capital at his disposal — a deposit is credited to his name, against which he is entitled to draw checks. Because banks are not required to maintain a 100 per cent reserve in cash against deposits, the volume of deposits created as a result of such loans may be in excess of the cash resulting from the accumulation of savings placed in the bank by individuals. Without entering into a technical discussion of commercial bank operation and reserve requirements, we may observe that banks, in effect, create short-term capital when they

lend money by the process of opening deposit accounts for borrowers. This short-term capital is at the disposal of the borrower. It is rarely invested in fixed assets, because banks usually insist on repayment within a few months. It is a common source of capital funds used to finance investment in inventories and pay rolls in advance of the receipt of funds from customers.

Controlling the Rate of Saving. Governmental bodies, through the tax system, and business managers, by reinvesting earnings, may consciously control the rate of saving. But who or what controls the rate of saving maintained by individuals? The importance of this question should be obvious to anyone who considers the relation between savings and the supply of productive goods, and the further relation between the supply of productive goods and the volume of commodities which maintain and elevate the nation's standard of living.

For individuals, saving always involves sacrifice. The act of saving is dependent on the decision not to spend all one's income. This decision may be made for any of several reasons, although traditional economic thought assumed that the interest rate was the guiding factor. When banks and other financial institutions offer high interest rates on deposits, the volume of savings increases; when interest rates are low, saving slumps. We recognize that this summary is not a satisfactory explanation of all decisions to abstain from current consumption.

There exists a universal desire to accumulate a reserve for unforeseen contingencies, so-called "saving for a rainy day." When practiced by the lower income groups, this type of saving probably continues regardless of interest rates. It has been suggested, indeed, that rainy-day saving would continue if no interest were offered on savings accounts, or even if a charge were levied for the privilege of leaving money on deposit in a safe place (so-called "negative interest"). In the middle-income groups, rainy-day saving provides the basic security fund, but a high interest rate offered by banks would probably stimulate the accumulation of available capital funds. In the top-income classification, no sacrifice is attached to saving. Except for the few with unlimited acquisitive appetites, expenditure cannot, in the ordinary way of life, dispose of the total income received.

Incomes are more flexible than spending habits. Fluctuations in national income brought about by the business cycle exceed

fluctuations in saving. A high national income provides a margin for saving above the normal spending pattern. A low national income, in a period of business depression, is usually accompanied by an effort to maintain living standards, so far as possible. Many individuals have long-term debt commitments, such as the purchase of a home or an automobile, which help to stabilize spending. As a result, the margin for saving is reduced. In general, nations with a liberal endowment of natural resources and high productive capacity, in which national income attains a high level, tend to accumulate a large fund of savings without great hardship.

The disposition to save is also affected by stability in economic life and in prices. Unsettled times, the breakdown of public order, uncertainty about the future purchasing power of money, all exercise an adverse effect on the accumulation of savings. In short, while there is a direct relation between the level of interest rates and the volume of savings, interest rates are only one of a series of influences to which the rate of savings responds.

CAPITAL SUPPLY MARKETS

We have observed that in the economic organization of modern society those who save are not always those who express the demand for capital. Savings are shifted through the money mechanism from savers to users. What agencies assist this transfer of savings? How are the capital supply markets organized? Let us examine these problems briefly.

The Investment Bank. The efficient organization of the task of collecting savings of all types into central reservoirs of capital funds is a comparatively recent development. In the Middle Ages, capital supply was entirely in the hands of individuals who extended loans from the accumulation of their personal savings. The early commercial bankers made loans from the pooled savings placed in their trust by a small group of wealthy families. Until the period of the Civil War, the supply of capital in the United States was maintained on a personal basis within a small circle of wealthy investors and the banks they fostered. Probably the single outstanding action which for the first time provided an outlet for the savings of millions of economically insignificant individuals was Jay Cooke's nation-wide promotional campaign in the Civil War years to sell United States bonds in small denominations.

Following the war years, commercial banks concentrated on

supplying short-term capital, so-called "commercial" loans extended to finance short-period self-liquidating transactions. The task of supplying long-term capital was taken over by various types of financial institutions such as savings banks and life-insurance companies. The chief marketing agency engaged in handling long-term capital loans was the investment bank.

With the growth of a highly developed capitalist economy in the United States, the investment bank has undertaken the performance of these significant functions: (1) initiating security issues; (2) underwriting, or guaranteeing their sale; and (3) distributing the securities. The performance of these functions by the investment banker has pursued the lines suggested by the following illustration.

A business concern facing the necessity of securing additional long-term capital established relations with a firm of investment bankers. Little competition or "shopping around" was practiced; once such connections were established, they were usually maintained for many years. The investment bank investigated the applicant's business affairs, appraised the desirability of issuing securities, bringing into the focus of the problem supply conditions for long-term capital, the general attitudes and readiness of large investors to place capital commitments, and the prevailing levels of interest rates for various types of securities.

If the decision was favorable, the investment bank determined the exact type of security to be issued, the price was set, and either alone or acting in concert with other banks and security houses, the sponsoring investment bank agreed to underwrite the issue. This involved a guarantee to pay the agreed sum to the business concern demanding capital, the underwriters assuming the risks attached to the sale of the securities. Money paid to the issuer of securities was immediately available to finance the erection of buildings, the purchase of existing plants, or the purchase of machinery. The underwriting group then proceeded to dispose of the securities to such investment agencies as commercial banks, savings institutions, insurance companies, endowed foundations, and individuals.

Criticism of the Investment Banks. In recent years serious criticism has been leveled against the performance of these capital supply functions by investment banks. Attention has been drawn to the fact that new enterprises as a class and small business units in general do not have ready access to capital supply markets.

Investment bankers, mindful of the underwriting risks they assume, prefer to handle only the securities of large, stable, well-established concerns. This places severe restrictions on new and small enterprises. It has been suggested that new types of investment institutions are required to aid such concerns in securing new capital and to prevent the eventual total domination of the American economy by a few large enterprises, following the slow strangulation of new and small units.

Another critical attack has been directed against the absence of competitive bidding for new security issues. It is pointed out that federal, state, and municipal securities are sold to the banking concern, or group, which bids the highest price. This practice is not followed in the flotation of private-security issues. The investment banker admits the truth of the charge, but points to the expense of the initial investigation, which could not be borne without the guarantee that the concern which pays for the investigation shall have the privilege of selling the securities. The defense further states, with some truth, that in the majority of cases competitive bidding would not lead to marked changes in prices.

A third, and probably more serious charge, has been that investment banks have failed to carry through their investigations preceding security issues, and that, as a result, many securities have been sold to investors which should never have been offered for sale. There have followed failure to continue interest payments or discharge of principal, losses by investors, and a breakdown of financial trust.

The Securities Act of 1933, in the endeavor to correct this situation, provided that full and detailed information about the company desiring to secure capital should be published prior to the issue of securities. This information must be available to prospective purchasers of securities. The underwriting bankers were required to guarantee the accuracy of all statements in every security prospectus by assuming full liability to all purchasers who might be misled or misinformed.

The Stock Exchange. The stock exchanges are often regarded as the markets through which new capital flows into industry. This is a misleading concept of the function of such institutions, the significance of price fluctuations for securities traded on the exchanges, and the relation of the exchanges to the supply of long-term capital funds.

The major function of a stock exchange is to aid in the purchase and sale of securities already issued and already purchased by initial investors. New issues of securities are not sold to investors through the medium of the exchange. The function of the exchange is related to the issuance of new securities, however. Because the exchange offers a ready market for securities, investors are more willing to purchase initial issues from investment banking houses. Investors know that if, for any reason, they prefer cash to the securities they have purchased, they can sell quickly through the exchange. The important function of the exchange, so far as new security issues are concerned, is that of providing a guarantee of liquidity for investors.

In no sense, therefore, should the stock exchange be regarded as a central capital supply market. Dealings on the exchange are confined to the purchase and sale of old securities. The capital investment made possible by the initial purchase of the securities has already gone into plant and equipment. The capital funds of industry are unaffected by daily price fluctuations on the exchange.

The Commercial Bank. Traditionally, the commercial bank has been the source of short-term capital funds. The classical view of the functions of commercial banks visualized them as centering around the lending of money to business enterprises to finance short-period, self-liquidating transactions. The ideal commercial loan, therefore, is one extended to a merchant to enable him to buy goods now which he expects to sell next month, from the proceeds of which sale he contemplates repaying the bank.

This interpretation of the functions of the commercial bank has been breaking down in recent years. Commercial banks have been lending money for investment in fixed assets for periods extending well beyond the 90-day limit of the old commercial loan. In addition, the commercial bank participates openly in the extension of long-term capital by investing part of the savings placed on deposit by individuals and business concerns. Commercial banks buy securities from investment-banking houses. They also lend money for short periods to investment banks. By purchasing large quantities of federal, state, and municipal securities, the commercial banks participate in the extension of long-term capital funds to public bodies.

SUMMARY STATEMENT

A review of the history of capital demand and supply suggests that capital has several important functions in the modern industrial system. (1) It aids in the organization of "roundabout" or capitalistic production. (2) It serves as a storehouse of human energy. (3) It increases the productivity of other factors of production.

Roundabout or capitalistic production is the natural result of the extension of the division of labor. To this extension of the division of labor may be traced many of the economies of mass production. Contrast the work of the artisan shoemaker who performs all operations necessary to make a pair of shoes with the production technique of the modern shoe factory. In the factory, each worker specializes on a single operation and the combined efforts of hundreds of specialized workers and machines are required to produce the finished commodity. The factory applies the principle of the division of labor. The production process is stretched out, for before manufacturing can be carried forward, a building must be erected, machines and tools must be purchased, workers must be trained, and all the factors of production must be organized under a guiding plan. This is capitalistic or roundabout production. It requires the accumulation of capital funds to finance the necessary heavy investment. Once organized, it is much more efficient than the handicraft system; it turns out a greater number of finished units, at a lower unit cost.

Capital is a storehouse of human energy. Money is saved and invested in buildings and machines which can be used over a long period of time. Savings accumulated in one place can be transferred to other points where, entering into production through their transformation into plant and equipment, the stored energy is released. In the same way, the store of energy accumulated by one person's decision to save may be transferred to others who release the energy by the act of investing the money in capital goods.

Finally, capital increases the productivity of the other factors of production. With machines men can do many times as much work as with their hands. The division of labor makes possible a vast increase in the volume of output. Every increase in capital adds to the productivity of the other production factors.

In broad outline, this is the organization, behavior, and influence of capital demand and supply. In the following chapters we shall discuss in detail the financial instruments utilized in transferring capital and the business operations which surround the extension and the use of capital.

DEFINITIONS

Fixed capital. Investment in plant and machinery.

Liquid capital. Often referred to as "current" capital. Investment in such assets as inventories and receivables which are converted into cash in the course of the daily operation of the business.

QUESTIONS, PROBLEMS, PROJECTS

A

1. From what is the business demand for capital derived?
2. Discuss briefly long-term financing and short-term financing.
3. Why is there a demand for capital?
4. To what event can the fact that demand for capital is greater than ever before be traced?
5. Do increases in the size of business units always result in increases in the demand for capital? Why?
6. Name the three respects in which the demand for long-term capital differs from the demand for short-term capital.
7. What risk is involved in an investment in plant and machinery that is not involved in an investment in raw materials and labor?
8. Define credit and explain the assumption upon which it is based.
9. Upon what elements does credit standing rest?
10. What are the two types of administrative problems in capital demand?
11. To what does a business man have reference when he speaks of the "break even point"?
12. If you were the person demanding capital, in what circumstances would you wish to induce the supplier to become a part owner? In what circumstances would you wish to induce him to become a creditor?
13. Name the three conditions upon which the supply of capital — in any type of economy — depends.
14. What is the single exception to this generalization?
15. What element in addition to saving is necessary in order to contribute to capital supply?
16. How can banks create short-term capital without savings?
17. Why is the margin for saving reduced in a depression?
18. Explain how the issuance of securities by investment banks works. Who buys the securities? Who gets the proceeds from the sale of the securities?
19. What are three critical charges levied against investment banks?
20. What is the major function of a stock exchange?
21. Has the commercial bank assumed any of the functions of the investment bank? How?

B

1. In a period of depression which type of demand for capital, short-term or long-term, will be most affected? Why?
2. What effect will consumer-demand conditions for a product have on the demand for long-term capital which the producer of that product possesses?
3. Will an investment in long-term capital by an entrepreneur be written off as a variable or fixed cost? Why?
4. What does the answer to question 3 indicate about the eagerness of business men to make investments in long-term capital? Will they be cautious or reckless about long-term financing?
5. If the demand for a product rises sharply because of an inexplicable change in consumer tastes, will the demand for long-term capital increase? Why? Will the demand for short-term capital increase? Why?
6. In time of prosperity will banks be more anxious to make long-term or short-term investments? Explain.
7. Analyzing in the light of question 5, what will the sudden occurrence of a depression mean to banks?
8. Does the answer to question 6 indicate any reasons why saving banks should be prohibited from having investment functions? What are they?
9. Why should manufacturers of defense products be reluctant to expand plant investment? Is this sound long-run policy from the point of view of the business men? From the point of view of the country as a whole?
10. Will investment houses always be more anxious to do business with large corporations with vast property holdings than with smaller partnerships or individual proprietorships? Explain. Does limited or unlimited liability have any bearing on this question?
11. In the case of expansion of national defense industries, will investors wish to become part owners or creditors? Why? What position will the borrowers wish the investors in national defense industries to assume?
12. If the government taxes industrial property heavily, what will be the effect on the demand for long-term capital? What will be the effect on the demand for short-term capital?
13. Is the person who saves income in any sense making a purchase? In what sense?
14. Comment on the following statement: "In 1931 the United States was in the grip of a major depression. One of the chief causes of this depression was the fact that the people lacked confidence in money." Is this true? Did the people lack confidence in money or did they lack confidence in some other element of the business process?
15. Why was the Securities Act of 1933 passed? What do you think of the criticism that the Securities Act curtails the expansion of business enterprises, thus working to the detriment of the country?
16. Comment on the desirability of commercial banks' participating openly in the extension of long-term capital by investing part of their demand deposits.

C

1. List the investment houses and commercial banks located in your home town. How long has each been in existence? Have any of them failed and reorganized in the last 15 years? How does the present number of investment houses and commercial banks in your city compare with the number in 1925? If there are fewer now, which ones have failed, when, and why?
2. Discuss in a short paper the legitimate functions of the stock exchange. Make out either the case for stock-exchange regulation or the case against it. Some research on this topic before writing the paper is advisable.
3. Should commercial banks be required to maintain a 100 per cent reserve in cash against deposits? Be prepared to defend your answer in a discussion, either written or oral.
4. Is it desirable to levy taxes against corporation surpluses which are being withheld to finance future expansion? Again you should be prepared to defend your answer.

SUGGESTED READING

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CHAPTER 22

LONG-TERM FINANCING

We have observed that business demands capital (1) because capital can be used productively, (2) because the nature of the capitalist organization of production necessitates investment before return, and (3) because the scale of operations in modern industry exceeds the capital-supply capacity of most business men. We have also observed the distinction between the demand for capital for long-term investment in fixed assets and the demand for capital for short-term investment in liquid or current assets.

We know why business men must borrow money, and why money is available to meet their need. We are now ready to consider the instruments of long-term financing of business. This chapter will consider how money is borrowed for long-term investment, under what conditions, and with what safeguards.

CLASSIFICATIONS OF SECURITIES

The general term "securities" is loosely applied to all financial instruments. Actually, this is a somewhat misleading term. It conveys the implication of safety, which may be present in greater or less degree in any particular issue, but certainly not to the same extent in all. And there are many different types of securities, some of which bear only a slight resemblance to others. Before attempting a detailed description of the important types of securities, let us open the subject by setting up several broad classifications.

Owner Securities and Creditor Securities. Two broad classifications have already been referred to in previous chapters. Those who supply capital to a business enterprise must be related to the enterprise either as owners or as creditors. In the ownership classification a distinction may be drawn between ownership investment in an individual proprietorship or a partnership, for which no securities are issued, and ownership investment in a corporation. Contribution to the proprietorship interest of a corporation is usually evidenced by shares of stock. Stock is issued

to those who have contributed to the proprietorship fund. The shares of stock so issued are evidences of a participation in the ownership of the corporation and of the right to participate in the division of profits under the terms and conditions set forth on the stock certificates. It is important to observe that ownership of stock in a corporation does not indicate the ownership of any specific assets, nor does it guarantee a return (commonly called a "dividend").

All other contributors to the capital of a business fall into the classification of creditors. Various types of bonds and notes are utilized as security evidence of the capital contribution. Sometimes, as in the case of suppliers of merchandise who extend the payment period for their merchandise and so contribute to an enterprise's working capital, no formal security is issued. These are often called "open-book accounts" and usually call for the payment of outstanding merchandise bills within a period of from 30 to 90 days.

It is of the utmost importance to distinguish clearly between owners and creditors. Creditors have fixed claims on an enterprise. Their securities may call for the payment of interest at specified periods. They pledge repayment of the principal sum at certain dates. In any case, the amount of money owed to creditors is fixed and stated. In some cases, specific assets of the enterprise are pledged as security for the payment of these debts, and creditors are entitled to seize such assets if their claims are not paid at the appointed time. Creditors have no right to share in the profits of the business, and ordinarily do not in any way participate in the direction of company affairs.

Owners do not have fixed claims on their enterprise. They share in profits in an agreed manner, if profits are earned and if the directors decide to distribute the profits. Ordinarily, the enterprise does not owe them any fixed sum of money. In some cases, stockholders participate in the direction of the enterprise's basic policies through their power to elect directors. As we shall observe in the discussion of types of stock, not all stockholders have this management power. The single major distinguishing characteristic is the absence of a fixed claim.

Types of Ownership Securities. Further distinctions can be drawn between several types of ownership securities. Stocks may be divided into the two classes of common and preferred. The

common stock of a corporation retains the final claim on income after payment of operating expenses and interest on bonds. It also retains, in the event of liquidation of assets, final claim on the assets, if anything of value remains after the payment of all other obligations.

Preferred stock, as its title suggests, occupies a preferred position in the array of stocks. If a corporation has outstanding both preferred and common stock, as is frequently the case, preferred stockholders are ordinarily entitled to a stipulated payment out of income before common stockholders are paid. In the event of liquidation of the business, preferred stockholders ordinarily precede common stockholders in their claim on assets over and above those required to pay off creditors of all types.

Both preferred and common stock are ownership securities. They differ from all varieties of creditor securities in the nature of their claim upon the business. Within the classification of ownership securities, however, there are many possible varieties. Each may occupy a distinctive position with regard to sequence of claims upon income and assets, voting rights, limitation of dividends, and similar issues.

Types of Creditor Securities. A parallel diversification can be discovered among creditor securities. Not all bonds are identical. We may identify mortgage bonds of various types, all of which retain for creditors, in addition to a general promise to pay interest and principal at specified periods, a pledge of certain assets which may be seized by mortgage bondholders if payments are not made as contracted. There are also bonds representing simply a general claim on the assets of an enterprise. These are commonly referred to as "debentures" and, in liquidation, follow the claims of mortgage bonds, if securities of that type have been issued. Further distinctions may be drawn between bonds of short and long duration, secured and unsecured bonds, bonds the value of which is reduced by periodic repayment of principal and bonds which are entitled only to interest payments until the stipulated principal payment date.

In short, the varieties of securities which may be issued are almost without limit. To understand fully their uses as instruments of long-term financing, we must describe in some detail the legal and technical definitions of each significant variety. Only in this way will it be possible to appraise the administrative policy which

dictates the use of certain securities in one business situation and different securities in another.

COMMON STOCK

The essential distinction between creditor and owner securities should now be clear. Creditor securities are obligations to pay stated sums of money, including interest and principal, at stated dates. Owner securities are evidence of a right to participate in the earnings of a corporation and, ordinarily, in the direction of its affairs. Bonds are creditor securities; stocks are owner securities.

The common stock of a corporation is usually issued in exchange for the investment of money or other assets. It represents the owners' contribution to the corporation's capital. It is evidence of their willingness to accept the risks common to all who venture their fortunes in the hope of a profitable return. Every share of common stock is identical in privileges and obligations with every other share of the same class.

The position of the common stockholder as the potential recipient of income, if profits are earned, and as the owner of the company's assets after all prior claims have been met, may be outlined most clearly if we consider several illustrations.

Examples of Common-stock Income and Liquidation Position. Suppose a new corporation is organized with all the initial capital secured through the sale of common stock, the total investment amounting to \$100,000. The balance sheet recording this investment will appear in the following form:

Assets		*Liabilities*	
Cash	\$100,000	Stockholders' interest	\$100,000
Total	\$100,000	Total	\$100,000

There are no prior obligations. If the enterprise were abandoned and the corporation liquidated, the common stockholders would share the assets in proportion to their respective contributions. No losses or diminution of assets having been experienced, each stockholder would receive exactly what he had contributed.

Let us imagine, however, that plans are rapidly carried forward. A small building is purchased, equipment is installed, and preparations are being made for the manufacture of the article for the production of which the company was organized. The following

balance sheet reflects the purchase of plant and equipment, prior to the beginning of operations:

Assets		*Liabilities*	
Cash	$ 20,000	Stockholders' interest	$100,000
Machinery and equipment	30,000		
Plant	50,000		
Total	$100,000	Total	$100,000

Up to this point no liabilities have been incurred, and no profits have been earned. If the corporation were liquidated at this point, stockholders would share all the assets in proportion to their holdings. The amount to be distributed has become indeterminate, however, because of the uncertain disposal value of plant, machinery, and equipment under forced sale conditions. There might be from $50,000 to $80,000 to share. Each stockholder would receive from 50 per cent to 80 per cent of his initial investment.

Let us carry the project forward another step. The plant goes into operation. Raw materials are purchased and only partially paid for. Because of the reduction of available cash, money is borrowed from a bank for a temporary period. The next sample balance sheet might appear as follows:

Assets		*Liabilities*	
Cash	$ 5,000	Accounts payable (mdse.)	$ 15,000
Accounts receivable	5,000	Note payable (bank loan)	20,000
Inventory	25,000	Stockholders' interest	80,000
Machinery and equipment	30,000		
Plant	50,000		
Total	$115,000	Total	$115,000

Certain liabilities now appear on the corporation's balance sheet, which represent prior claims upon the assets. In the event of liquidation, the assets carried on the books at a valuation of $115,000 probably would be reduced in a forced sale to a realizable cash sum of not more than $80,000. Merchandise creditors and the bank creditor would secure payment in full, subtracting $35,000 from this sum. The stockholders' interest is residual. They share what is left after all creditor claims have been settled. If assets, as represented on the above balance sheet, were reduced to the cash sum of $80,000, $45,000 would be left for the stockholders after paying off the creditors. This would be shared among the stockholders in proportion to their initial investment.

Suppose the business is successful. Sales increase rapidly and an expansion program is carried forward. More stock is sold to provide funds and, finally, a new plant is erected, the money supplied by an issue of bonds. The position of the corporation might then be reflected by the following balance sheet:

Assets		*Liabilities*	
Cash	$ 30,000	Accounts payable (mdse.)	$ 65,000
Accounts receivable	95,000	Notes payable (banks)	95,000
Inventory	210,000	Bonds	350,000
Machinery and equipment	175,000	Stockholders' interest	425,000
Plant	425,000		
Total	$935,000	Total	$935,000

Two things should be observed in connection with the stockholder's position at this stage of the corporation's history. A new group of creditors, the bondholders, have assumed a position ahead of the stockholders. Interest on the bonds, as stipulated in the contract, must be paid before any profits are available or distributed to stockholders. Second, in the event of liquidation, bondholders' claims must be paid in full before the stockholders receive a penny. The stockholders as the owners of the business can expect to salvage part of their investment only if the assets prove to be more than sufficient to meet creditors' claims in full.

These examples illustrate a cardinal principle for all common stocks. They represent the owners' contribution to the capital of a corporation. They hold residual claims against earnings and assets. No profits may be distributed to stockholders until all expenses have been met and all interest payments have been discharged. In the event of liquidation, stockholders share in the cash realized from disposal of assets only after all prior creditor claims have been paid in full. If the assets prove insufficient to pay creditors' claims in full, stockholders receive nothing.

Authorized, Outstanding, and Treasury Stock. The certificate of incorporation which is the working charter of a company authorizes the issue of a specified number of shares of specified classes of stock. This is the maximum "authorized" stock issue and may be exceeded only by amending the corporate charter. Ordinarily, not all the stock authorized will be issued immediately. That part which is sold is called the "outstanding" stock. Frequently, a corporation buys back part of the previously issued stock.

Such repurchased stock is usually called "treasury" stock. To illustrate these types of stock, consider the following example.

The certificate of incorporation authorizes the issuance of 100,000 shares of common stock. Fifty thousand shares are sold to the general public at an average realized price of $40 per share. Within the following five years, the corporation repurchases 1000 shares at an average price of $25 per share. The *authorized* stock is 100,000 shares. The *outstanding* stock is, first 50,000 shares, and, after five years, 49,000 shares. The *treasury* stock is 1000 shares.

Par and No-par Stock. Common stock is issued either with a stated par value, or with no par value. The phrase "par value" is often misinterpreted. It signifies face value, or stated value. Most states have required corporations issuing stock with stated par value to sell the shares at par. If the stock was sold at less than par, purchasers have assumed responsibility for paying to creditors, in the event of liquidation, the difference between stated par value and purchase price.

It has been observed that purchasers of common stock have often been misled by the stated par value printed on the face of the stock certificate. They have assumed a relationship between stated par value and real value on the books of the corporation. No such relationship exists. As residuary claimant to earnings and assets, common stock has a fluctuating value which may, at various times, be above or below stated par value. Actually, as many as four different values may be attached to a share of common stock: (1) par value, or the amount stated on the certificate; (2) market value, or what the stock can be sold for; (3) book value, or the excess of assets over liabilities, and (4) real value, or what the shareholder would receive in the event of liquidation of assets.

The four values are never identical. Market value is the result of day-to-day estimates of investors and stock traders concerning the future earning capacity of the company, the dividend policy of the directors (their disposition to distribute profits among shareholders rather than retain profits for reinvestment in the business), financial standing, and the outlook for the industry. Book value on the corporation's records is the difference between stated value of assets and stated value of liabilities. It is represented normally by paid-in capital stock plus undistributed profits, commonly described as "surplus." Book value per share is computed by dividing total book value by the number of shares outstanding.

Real value is determined by the actual number of dollars which might result from forced sale of the assets in liquidation proceedings, less the amount of the liabilities. Consideration of these four values emphasizes the insignificance of stated par value as a true measure of the worth of a share of stock.

Issuance of common stock with stated par value (ordinarily $100 per share) was for many years required in all states. In the past three decades, however, more than 30 states have enacted legislation authorizing the issue of stock with no stated par value. This development has given greater flexibility to stock issuance. Stock can be sold at any time at prices which reflect current market values. Purchasers incur no further obligation to creditors, as they do in the case of par-value stock sold at less than par. The attention of potential investors is directed toward market and real values rather than toward the nominal par value.

Voting Control. Certain rights and privileges are attached to the ownership of common stock. The most important of these privileges is that of participating in the control of the corporation's affairs. Ordinarily this power is not exercised directly. Stockholders delegate executive and supervisory authority to a board of directors chosen by the stockholders at their annual meeting. Stockholders retain the right to appoint and remove directors. Acting for the stockholders, the directors select the administrative officers of the corporation — president, vice-presidents, secretary, treasurer, etc. This transfer of authority from stockholders to directors represents a concession to convenience. Large corporations often number their stockholders by the thousands. Widely scattered, holding only a few shares each, with little knowledge of corporate affairs and poor facilities for acquiring information, the stockholders are rarely in a position to supervise and direct corporate policies. The ultimate voting control, however, ordinarily rests with the common stockholders.

Other privileges of the common stockholder include the right to receive dividends, when declared, equally on a per-share basis with all other owners of the same class of stock; the right to subscribe to new issues of stock (thus preventing the dilution of his interest in the corporation); the right to share with other stockholders equally on a per-share basis in assets remaining after the payment of all creditors in liquidation; the right to sell his stock; and the right to inspect the books of the corporation.

Some distinction should be drawn between the rights and privileges of common stockholders in theory and in practice. In discussing the corporate form of organization in Chap. 10, we observed practices and devices for concentrating control in the hands of minority interests. The theoretical controlling power attached to the ownership of common stock is rarely exercised in practice. Management and ownership have become widely separated functions. As an aid in concentrating control, the practice has spread of issuing two or more classes of common stock, ordinarily referred to as "Class A" stock and "Class B" stock. Rights attached to the two classes of common may be identical, with this exception, that only one class possesses voting rights.

Common Stock — Summary. We may summarize this brief description of common stock by observing that it is a pure ownership security. It bears the greatest risk, among all types of securities, because it claims a share only in profits left after settlement of all prior claims of other security-holders. There is no guarantee of return on common stock. On the other hand, common stock holds out the promise of unusually large returns in cases of high profits remaining after settlement of prior claims.

PREFERRED STOCK

Preferred stock occupies a position midway between common stock, the pure ownership security, and bonds, the pure creditor security. Common stock is evidence of ownership right to a residual claim on earnings and assets. Bonds are evidence of contractual obligation to pay stipulated sums of money at stipulated dates. Preferred stock carries a limited right to participate in profits. It resembles a bond in the stipulation of limited payments at periodic intervals. It resembles common stock in that dividends are contingent on the earning of profits, whereas bond interest is frequently paid by corporations operating at a loss.

The title "preferred stock" is derived from certain prior rights held by this class of stock over other classes of stock. Ordinarily, preferred stockholders have a claim on the earnings of a corporation ahead of the claim of common stockholders. The dividend rate for preferred stock is stated on the face of the stock certificate. A \$7.00 preferred stock gives its owner the right to receive an annual dividend of \$7.00 per share (if profits are earned and funds

are available) before any payment is made to common stockholders. In many instances, priority rights over common stock are extended to a claim on assets in liquidation.

Cumulative and Noncumulative Preferred. Certain subclassifications of preferred stock may be noted. Reference is often made to cumulative preferred stock and noncumulative preferred stock. Cumulative preferred retains the right to full payment of past dividends before any payment is made to common stockholders. If a corporation with outstanding cumulative preferred stock fails to pay the stipulated preferred dividend in any year, the deferred dividend accumulates and must be paid together with the current dividend in the following year before any dividend is paid on common stock. In periods of prolonged depression, a corporation may fail to pay preferred dividends for several successive years These dividends accumulate and must be paid in full before the common stockholders receive any dividends. Noncumulative stock retains no right to receive past unpaid dividends. To holders of noncumulative preferred stock must be paid simply the current dividend before common stockholders receive dividends.

Numerous other classifications may be set up. For a more detailed discussion of these technicalities the reader is directed to any basic text on corporation finance.

Voting Rights. Preferred stockholders do not ordinarily participate in corporate management. Voting power is usually placed with common stockholders. This practice need not be followed in all cases, however, and issues of preferred have been sold with full voting rights equal to those of common stockholders, or with limited voting rights. One common type of limitation withholds voting rights from preferred stockholders until failure to pay several successive dividends.

Consideration Leading to Issuance of Preferred Stock. Preferred stock holds out the promise of more regular dividend payments than does common stock. It holds a prior claim on earnings and, in liquidation, on assets. It provides less control over management policy than does common stock. Income paid to preferred stockholders is limited. Compared with common stock, preferred ordinarily offers greater security and lower returns. Compared with bonds of various types, preferred stock offers less security and higher returns. It is a mixed form of security, with points of resemblance to both common stock and bonds. Why is it ever

issued? What considerations lead corporate directors to offer this type of security?

From the viewpoint of the corporation issuing the stock, and particularly from the viewpoint of the existing common stockholders, the issuance of preferred stock provides a means for securing new capital without diluting the ownership interest of existing common stockholders. A similar result may be achieved through the sale of bonds. But bonds carry fixed interest obligations which must be met at contract dates. Preferred-stock dividends are not guaranteed; they are paid only if profits are earned and are available for distribution.

It should be observed that it is advantageous for common stockholders to secure new capital through the sale of securities bearing a fixed return, so long as the corporation's rate of earnings on the new capital exceeds the interest rate necessary to secure its investment in the business. Thus, if bonds can be sold bearing an interest rate of 5 per cent, or preferred stock at a net return of 7 per cent to the preferred stockholder, while the corporation earns 14 per cent on the money so invested, the common stockholders find their profits substantially increased.

If a corporation has a capital structure consisting of $1,500,000 of common stock and $1,500,000 of 5 per cent bonds, and regularly earns at the rate of 12 per cent on its invested capital, the common stockholder gets a return of 19 per cent. A return of 12 per cent on the total invested capital of $3,000,000 is $360,000. Annual bond interest (5 per cent on a total of $1,500,000) amounts to $75,000. The balance available for common stockholders is $285,000 or 19 per cent on the total stock interest of $1,500,000. If the directors believe that the investment of an additional million dollars of capital funds will yield profits at the accustomed rate of 12 per cent, it will be very advantageous to the common stockholders to secure the money by issuing more bonds bearing interest at 5 per cent, or preferred stock paying 7 or 8 per cent. Securing new capital through the sale of additional common stock will not benefit existing stockholders. All new common stockholders share equally with old stockholders in dividends paid to this entire class of stock.

A further advantage to corporation and common stockholders is the absence of fixed obligation to pay dividends to preferred stockholders. To balance this advantage, consideration must be given

to the higher rate of return which must be paid to preferred stockholders. Because there is no contractual agreement to pay either dividends or principal sum, and because preferred stock is preceded in liquidation by current liabilities and all outstanding creditor securities, preferred stocks carry a greater investment risk than do bonds. Investors must receive a higher rate of return to compensate for a higher risk.

Considerations Leading to Purchase of Preferred Stock. What of the investor's attitude toward preferred stock? First, preferred stock holds out the promise of a higher return than bonds. Investors whose primary interest is in a high rate of return rather than in the greatest possible security may seek out preferred stocks rather than bonds. Yet many investment authorities believe that the combination of limited return and absence of guaranteed payments renders preferred stock less attractive than either bonds or common stock as an investment. Safety and security are less than bonds offer, on the one hand. Potential earnings are less than common stocks hold out, on the other.

BONDS

All types of bonds fall into the general classification of creditor securities. They are all contractual obligations calling for payment of specified interest and repayment of principal at stipulated dates. Payments are guaranteed by the borrowing corporation. They are often protected by the pledge of property or other security which is forfeited if contracted payments are not completed. Failure to make payments may lead to bankruptcy and either reorganization dictated largely by the bondholders, or liquidation of assets. Bondholders precede owners in their claim upon both earnings and assets.

Many types of bonds may be issued. They differ from one another with respect to the pledging of assets as security for payment of interest and principal, interest rate offered, period during which bonds are outstanding, and provisions for repayment of principal. Some of the major classifications of corporate bonds will be briefly described in the following paragraphs.

Secured Bonds. An important distinction should be drawn between secured bonds and unsecured bonds. An unsecured bond is a simple promise by the borrowing concern to pay to the registered holder of the bond a stipulated principal sum at a stipulated

time and place, and to pay a stipulated rate of interest at certain dates until the date of repayment of principal. Such a bond is often referred to as a "debenture." Its only security is the general credit of the issuing corporation. A secured bond is a similar promise to pay, supported by the pledge of certain assets of the corporation. If the corporation fails to complete payments of interest and principal as contracted, bondholders are entitled to seize the pledged assets in foreclosure proceedings.

The best example of a secured bond is a first-mortgage bond. Such a bond holds as security a first mortgage on specific assets of a corporation such as factory buildings, a division of a railroad, or the entire plant and equipment of the issuing concern. In case of default in stipulated payments, bondholders may take title to the pledged property.

Second- or third-mortgage bonds may also be issued. These follow first-mortgage bonds in their claim on pledged assets. Thus, an issue of $1,000,000 of first-mortgage bonds may have as security the entire plant and equipment of a concern. In case of failure to complete payments as stipulated, title to the property passes to the first-mortgage bondholders. If the property is then put up for sale and yields $1,500,000 in cash, first-mortgage bondholders are entitled to payment in full for their outstanding issue of $1,000,000. The remaining $500,000 is available for distribution to second-mortgage bondholders. If there is more than enough to satisfy their claims, the balance is available for third-mortgage bondholders (if such securities have been issued) and holders of ownership securities.

Another example of a secured bond is the collateral trust bond. This type of bond holds the security of pledged property. The property in this case is not composed of such physical assets as plant and equipment, but securities — stocks and bonds — owned by the corporation and pledged to the collateral trust bondholders in the event of failure to complete payments of interest and principal.

Investment Considerations for Secured Bonds. Because of their first-rank position in the sequence of creditor claims against the earnings of the issuing corporation and their claim to specific physical assets in the event of failure to complete payments as contracted, first-mortgage bonds carry the least risk of all types of securities. It is natural, therefore, that they should offer the

lowest interest rate among all types of securities issued by a single corporation. Not all first mortgage bonds are equally safe, however. Consideration must be given to the character of the specific assets pledged in the mortgage, as well as to the general earning capacity of the issuing corporation. A concern which exhibits a long record of stable earnings amounting to several times the annual interest on first-mortgage bonds may provide greater safety for its bonds than another concern of uncertain or fluctuating earning power which pledges assets of no great value.

In general, investors in secured bonds attach more importance to safety of principal than to high rate of return. Throughout the range of securities, interest rates balance degree of risk. Low risk is accompanied by a low interest rate, high risk by a high interest rate. The investor whose primary desire is a high rate of return, in securing which he is content to assume greater risk of loss of part of his principal sum, directs his attention to junior secured bonds (second- or third-mortgage bonds), or to unsecured bonds. For still higher return, accompanied by even greater risk, he looks to the group of ownership securities, to preferred stock, and above all to common stock.

Unsecured Bonds. Unsecured bonds, often referred to as debentures, are not protected by the pledge of tangible physical assets or securities. They are issued simply against the general credit of a corporation. Their value depends, therefore, on the earning capacity of the issuing concern. While earnings are sufficient to pay interest and retain confidence in the certainty of repayment of principal when due, unsecured bonds are as safe as secured bonds.

Issues of debentures are often made more attractive to prospective investors by the inclusion of a provision for a sinking fund. Such a provision requires the issuing corporation to set aside a specified amount of cash annually either to repurchase a proportion of the bonds immediately or to build up a fund for the ultimate repayment of principal at the due date. With a sinking fund in operation, the safety of an issue of debentures is increased with every passing year, either by a reduction in the amount of the issue outstanding, or by an accumulation of cash which can be devoted only to their ultimate repayment.

THE FINANCIAL PLAN

Having surveyed the significant types of securities which are utilized in long-term financing of corporate business, we are now ready to consider the fundamentals of the financial plan. How do business men determine what type or types of securities to issue? How do they determine what interest rates bonds should bear, or for what term bonds should be issued? What calculations underlie the decision to secure 60 per cent of the necessary funds by issuing common stock and the balance from the sale of bonds? What determines the dividend rate to be paid on preferred stock? These and similar problems must be considered in planning the financial structure of a business enterprise.

Fundamentals of Long-term Financing. The experience of thousands of business enterprises makes it possible to frame certain fundamental principles of corporate financing. First, when future earnings are uncertain or unpredictable, common stock should be issued and no other type of security should be sold. Second, preferred stock may be sold when future earnings are uncertain, but hold out the promise of maintaining over a period of years a substantial margin above preferred-dividend requirements. Third, bonds should be sold only when future earnings promise to be stable and several times the sum required to meet interest payments. In short, no business administrator should load his enterprise with fixed obligations unless there is every reason to anticipate steady and sufficient earnings. The only safe way to finance a business with an uncertain future is through the issue of common stock which does not carry a promise to pay a stipulated dividend every year.

The reasoning which supports these principles is simple and understandable. Failure to pay bond interest (commonly referred to as a "default in payments") entails serious financial difficulties, often terminating in corporate reorganization. The continuing life of the corporation demands freedom from interest charges too heavy to be assumed with a comfortable margin to spare. Conservative bankers and industrialists ordinarily frown upon the issuance of bonds by new and untested industrial enterprises. They prefer to see this type of security issued only by established industrial concerns with a record of steady earnings, or by public-

utility enterprises which usually enjoy greater stability in sales and earnings than do industrial companies.

The most reliable guide for determining the long-term financing plan for an enterprise is its future earning capacity. The best way to determine future earning capacity for a new enterprise is to consider the earnings of other concerns in the same industry. The best way to determine future earning capacity for an enterprise formed by combining existing plants, or by expanding an established concern, is to consider past earnings of the units forming the combination or expansion. Past history is not always a reliable guide, however. It has been observed that in the so-called "trust" era of great consolidations in American business (1889–1904), almost every great combination estimated future earnings in excess of the combined earnings of the component companies prior to consolidation. In most cases, the consolidated enterprise did not yield greater profits than the integrated companies; in a number of instances, earnings were conspicuously less.

Investors' Preferences. As in any other business problem, conditions of demand must be considered as well as conditions of supply. Decisions about types of securities to be used in long-term financing must be appraised in the light of the preferences of investors to whom the securities are to be sold. Preferred stocks have risen and declined in popularity during the past two decades. Consumers often prefer common stocks to bonds issued by industrial concerns. Popular preferences change with respect to the term of bond issues. Prior to the final decision about all security issues, current trends in investment preference must be consulted. In finance, as in sales management, it is good business practice to sell customers what they want to buy rather than to try to induce them to purchase whatever happens to be available.

Maintenance of Control. Another factor which often influences the financial plan of a new enterprise is the desire of the original organizers and promoters to maintain control in their own hands. This has been an important cause for the widespread use of the holding-company device. It also induces promoters to retain a large proportion of the common-stock issue (which alone has voting rights), or to secure much of the capital by selling other types of nonvoting securities to the general public. Occasionally, control is kept in the hands of the organizing group by the device of splitting the common stock into two classes, of which the larger class, without

voting rights, is sold to outside investors while the smaller class, with voting rights, is retained by the promoters.

Illustration of a Financial Plan. A concrete illustration of the fundamentals of long-term financing discussed in the preceding paragraphs may be found in the following description of the organization of a concern to manufacture engine parts to be sold to the automobile industry. Three men with an average experience of 10 years in the manufacture of similar equipment were the initiators of the project. They agreed to invest $50,000 each as their contribution to the capital of the new concern. All three men would also participate actively in the direction of affairs, one as production manager, another as sales manager, and the third as treasurer.

The preliminary survey indicated that a suitable factory building could be purchased for $100,000. Part of the machinery required in production could be secured secondhand; but it would be necessary to purchase a substantial amount of new equipment. Total machinery charges were expected to be about $300,000. The organizers estimated that at least $700,000 of working capital would also be required to purchase raw materials and pay operating expenses until the business was on a profitable basis. The total capital requirements were thus estimated to be at least $1,100,000, of which $150,000 would be subscribed by the organizers.

Survey of the experience of other concerns in the same and related industries indicated that earnings often were equal to 15 per cent on invested capital. It was also observed that earnings fluctuated rapidly, following the relative prosperity or depression of the automobile industry. In some years, profits were nonexistent. Over a 10-year period, profits of representative firms averaged 9 per cent of invested capital.

An investment banker was consulted for advice in planning the security issues. He suggested that no bonds should be offered, because the concern was new and was entering a competitive industry characterized by fluctuating profits. He recommended that preferred stock should not be sold for the time being. Later, if earnings displayed a reasonable stability, preferred might be issued as a device for financing expansion. He recommended that common stock be issued as the basic long-term financing instrument. The common stock should be divided into two classes, Class A, nonvoting, but preferred as to dividend payments up to $6 a share;

Class B, voting. Under this arrangement, Class A stock would be paid dividends of $6.00 a share before any payments were made to Class B stockholders. Thereafter, Class B stockholders would be entitled to dividends of $6.00 a share. After $6.00 dividends had been paid on both classes of stock, all further dividends would be shared equally by both classes of stock. He suggested that 20,000 shares of Class B stock should be given to the three promoters of the business in return for their capital contributions to the enterprise. The Class A issue should yield $900,000 of new money. He also suggested that $100,000 be borrowed from bankers on one-year notes. The business would then carry a fixed charge burden of not more than $6,000 (interest on one-year notes), and voting control would remain in the hands of the organizers.

CORPORATE FAILURE AND REORGANIZATION

A distinction should be drawn between the failure of a corporation and the failure of a proprietorship or a partnership. In the event of failure of a business organized under either of the latter forms, no bonds are outstanding. Bank and merchandise creditors can force an immediate liquidation of assets. But in the large corporation so many interests are involved and the value of the assets of the corporation as a going concern is so much greater than in immediate liquidation and dismemberment, that it is often thought wise to attempt to reorganize the capital structure and continue the business. Often this involves some reduction in fixed charges, and the contribution of new capital by existing stockholders.

Public utilities, indeed, may often be prevented by the courts from terminating operations. They furnish a vital public service upon which other business organizations and individuals depend. They may therefore be compelled to accept a court-appointed officer, called a "receiver," to direct operations until creditors and owners can work out a satisfactory financial reorganization.

The chief result of corporate failure and reorganization is the evolution of a new financial plan. New money is ordinarily required. This is not easy to secure in the light of the unsuccessful operating record which led up to the reorganization. In most instances, senior bondholders are in the strongest position and are called upon to make the smallest sacrifices. Stockholders are in the

weakest position and must make the greatest sacrifices. Often they are faced with the alternatives of contributing new capital or finding their ownership interest completely wiped out.

Protective Committees. Protective committees usually come into existence when reorganization is imminent. One committee represents the stockholders, and is usually drawn from the ranks of the directors. Another committee represents the holders of creditor securities. If the security structure is complex, with several types of bonds outstanding, several creditors' committees may be active, each representing a different class of bondholders.

The task of each committee is to act in the interests of its security classification. The ultimate reorganization plan represents a compromise of conflicting interests, each group yielding what it must to secure a new financial plan which will provide needed additions to capital and a satisfactory reduction of fixed charges. In the end, senior bondholders may have to accept new bonds bearing lower interest charges; junior bondholders (owners of second-mortgage bonds, or of debentures) may be compelled to exchange part or all of their holdings for income bonds, with interest payable only when earned, or preferred stock; while the old common stockholders may have to subscribe new capital on an equitable per-share basis, or have their shares entirely wiped out.

No reorganization ever satisfies all participants. Yet every well-planned reorganization should provide the basis for successful future operation. Losses through reorganization should be less than potential losses if no agreement could be reached and all corporate property were auctioned to the highest bidder.

As a result of these diverse considerations, no uniform pattern can be established for corporate reorganization. Each failure represents a new situation, with its own causes, its own possibilities for compromise, and its own line of potential solution.

DEFINITIONS

Common stock. The basic ownership security which retains a final claim on income and, in the event of liquidation, on assets.

Debenture. Unsecured bonds issued against the general credit of a corporation.

Mortgage bond. A secured bond support by the pledge of physical assets such as plant.

No-par stock. Stock carrying no stated par value.

Par value. Face or stated value representing actual investment or potential liability of owners.

Preferred stock. Ownership security with certain prior claims, as compared with common stock, against earnings and, in the event of liquidation, assets.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What topics, in summary, does this chapter consider?
2. Of what are shares of stock evidence?
3. What is the basic difference in the claims which owners and creditors have on an enterprise?
4. Make clear the fundamental distinction between mortgage bonds and debentures.
5. What does common stock represent?
6. In the event of liquidation, are bondholders' claims satisfied before or after stockholders' claims?
7. Differentiate between authorized stock and outstanding stock.
8. What are the four different kinds of value which may be attached to stock?
9. How many states have enacted legislation within the past three decades authorizing the issue of stock with no stated par value?
10. Name some privileges of a common stockholder.
11. In what respects does preferred stock resemble a bond? In what respects does it resemble a share of common stock?
12. What happens if a corporation fails to pay the stipulated preferred dividend to holders of noncumulative preferred stock in any year?
13. Compare the advantages and disadvantages of preferred stock with bonds; with common stock.
14. Why do preferred stocks carry a greater investment risk than bonds?
15. What is an unsecured bond? What is another name for it?
16. How does a collateral trust bond differ from any of these other bonds previously discussed?
17. Explain the sinking fund and how it works.
18. How do you go about determining the long-term financing plan for an enterprise?
19. Why did the investment banker consulted in the illustration in the text suggest that no bonds be offered in the new enterprise?
20. What are protective committees? Whom will they represent?
21. When will a court appoint a receiver? What will be his job?

B

1. Will the form of ownership of a company (partnership or corporation) have any bearing on whether an investor becomes an owner or a creditor? Explain.
2. In the case of an industry which is likely to make enormous profits in the short run, will an investor buy preferred stock or common stock? Why?

3. Is it desirable, from the point of view of the public, to have an almost limitless variety of securities which may be issued? Can you suggest any limitations dictated by sound public policy?
4. Does a shareholder take more or less risk than a general creditor? Explain. Will a shareholder or a general creditor have more interest in seeing that the officers of a corporation conduct themselves properly? Why?
5. Why should merchandise creditors and bank creditors have a prior claim on corporate earnings and assets?
6. In what situations would you invest in a company as a bondholder rather than as a stockholder?
7. As a prospective investor in a corporation, in which of the four types of stock value would you be most interested? Why?
8. From the point of view of a business world organized so that the inherent pressure on a business man will be to act responsibly, what do you think of the policy of issuing stock to which voting rights are not attached?
9. What are the advantages of cumulative preferred stock as against an ordinary bond from the investor's point of view? Are there any situations in which an investor would rather have a bond?
10. Why are voting rights not attached to shares of preferred stock?
11. In what situations will an issue of preferred stock ordered by the officers of a corporation be advantageous to the common stockholders?
12. In general, will the interest rate on secured bonds be higher or lower than the interest rate on unsecured bonds? Why? What general point about the relationship of chances of profit to risk does this illustrate? Where else have you encountered this same point?
13. What does the establishment of a sinking fund to liquidate debentures mean to the common stockholders?
14. If you were an officer in an expanding aluminum company in 1941, would you have issued common stock, preferred stock, or bonds? Why?
15. Why are there variations in the demand for the different kinds of owner and creditor securities?
16. Summarize the conditions in which a financially defunct corporation should reorganize rather than immediately liquidate.

C

1. Find what restrictions the Securities Act of 1934 imposes upon the sale of securities. Comment in a two-page essay upon the desirability or undesirability of these rules.
2. Construct a chart illustrating clearly the various devices by which a business man financing a new enterprise may obtain long-term capital, what obligations he assumes in using each kind of device, and what risks the investor assumes in lending money by means of each kind of device.
3. Investigate your state statutes and discover whether or not your state authorizes the issue of stock with no stated par value.
4. Assume that you are bequeathed $1,000,000 by a wealthy relative to invest at your discretion. How would you invest it and why?

5. Assume that you are a wealthy industrialist manufacturing a defense product, who needs to expand his production facilities immediately and needs long-term capital to do it. Explain in not more than two pages the sources from which and the devices by which you would obtain the needed capital.

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CHAPTER 23

SHORT-TERM FINANCING

Business enterprises require two types of capital. They require capital for investment in fixed assets, such as plant and equipment. They require capital for investment in liquid or current assets, such as inventories, accounts receivable, and the necessary working balance of cash for day-to-day needs.

Capital for fixed assets is invested for long periods; the useful life of a factory building is often more than 20 years. Capital invested in current assets is used for short periods. This chapter will be devoted to the consideration of the working capital requirements of business enterprises, the sources of short-term financial advances, and the institutions which participate in short-term financing of business. Because of the growing significance of consumer financing, the concluding pages will summarize the position of the consumer and the problems incident to the extension of short-term financing to consumers.

WORKING CAPITAL

To understand the business need for short-term financing, and the problems connected with its supply, it is necessary to begin with a general description of working capital. A distinction has already been drawn between fixed assets and current assets. Fixed assets, or fixed capital, include all the permanent properties of a business — plant, machinery, and equipment — which are slowly used up in the course of normal operations. They represent long-term investments. They do not change their form, and they are not bought and sold in the regular daily operating routine. Liquid assets include all other assets: inventories, receivables, and cash. Their distinguishing characteristic is their vital relation to daily operations. They are used to run the business; they are bought and sold; they are changed in form and then are sold. These assets make up a firm's working capital.

Amount of Working Capital Required. Every business concern requires an adequate supply of working capital. Failing this supply, and although the business may be equipped with an

efficient productive plant, operations may falter for lack of adequate inventories, or sufficient cash to meet current liabilities as they fall due. But what is an adequate supply of working capital? Clearly, it is not the same for all firms in all industries. Some types of business naturally require the maintenance of a more liquid position than do others. Retail and wholesale enterprises, with their heavy investment in merchandise and their rapid turnover of inventories, need a relatively large supply of working capital. Public-utility enterprises and many heavy industries require a relatively small supply of working capital. Their needs are rather in the building up of an extensive investment in plant and equipment.

What determines a firm's working capital requirements, then? One influential factor is the nature of the business operations in which the firm is engaged. Some operations depend upon an extensive investment in fixed plant, others require large inventories and a strong cash position. A second factor is the credit needs of the firm's customers. If trade practice and customers' demands force a firm to offer long payment periods, working capital must be correspondingly increased to finance this extension of credit. A third factor is the length of the manufacturing or merchandising cycle. If an enterprise engages in productive operations over a long period, with weeks or months intervening between the first purchase of raw materials and the ultimate sale of the finished product, its working capital must be built up to finance the drawn-out productive process. Similarly, if a merchandising enterprise must stock goods long before they can be sold and paid for, working capital must be increased to finance the investment in inventory.

Sources of Working Capital. A close connection exists between the amount of working capital required by a business enterprise, and the sources from which it secures this capital. Working capital may be drawn from a variety of sources. A business with limited uses for working capital may draw a sufficient supply from a single source. An enterprise requiring a large amount of working capital often must rely on the combined capital contributions of several sources.

The principal sources from which a business enterprise may derive its working capital are three in number. First, it may be secured from the stockholders. Funds secured from owners would, in this instance, be more than sufficient to cover the investment in

fixed plant and equipment. They would also cover investment in inventory, receivables, and working cash balance. Second, working capital may be borrowed from investors (that is, purchasers of bonds or notes, who assume a creditor position) or banks (which make short-term loans). Or third, working capital may be secured from merchandise creditors by delaying payment for merchandise supplied by them.

Certain observations may be added, in summary form, concerning the desirability of securing working capital from these sources. It is usually assumed that the owners of an enterprise will provide at least part of its working capital. Such a policy inspires confidence. Among the larger and more successful American corporations, adherence to this policy has become common. Current operations and expansion are financed out of past earnings.

Provision of working capital by stockholders is often supplemented by the contributions of bondholders, that is, working capital supplied by long-term creditors. Many enterprises consciously or unconsciously augment their working capital by delaying payments to creditors, thus in effect retaining the use of creditors' money for the period preceding final payment. But the traditional and still the most common source of working capital is the commercial bank. And the traditional financial instrument for accomplishing this transfer of working capital is the short-term commercial loan.

THE COMMERCIAL BANK

The commercial bank is the focus of the financial activities of American business. Its importance in the maintenance of the good health of the economy may be grasped if it is compared to the human heart which by its pumping action causes the circulation of the blood stream through the arteries and veins. The commercial bank is the repository of the surplus and working funds of the business enterprises of its community. It provides the medium of exchange in the check-writing system. It is the major supplier of working capital through its commercial loans. Only by the greatest stretch of the imagination can one conceive the normal flow of business activities proceeding in the absence of commercial banks.

The principal functions of a commercial bank can be conveniently summarized:

1. It assembles the surplus funds of its community, drawing from both business firms and individuals. The attractions are (*a*) interest payments, and (*b*) safety.

2. It makes loans to business men and consumers. In this function, the commercial bank serves as middleman in the distribution of credit.

3. It provides much of the working capital of the community's business enterprises.

4. By its power to lend money or deny loan applications, it discriminates between business enterprises, exercising the right of selecting those enterprises which hold out the hope of prospering.

5. It serves as investment counsel, financial adviser, and capital administrator. Where money has been loaned, or where a loan is contemplated, the commercial bank often extends its supervisory interest. It may set the conditions under which a loan will be granted, or dictate policy revision necessary to secure continued financial support.

Commercial Loans. Our chief interest in the commercial bank, as we examine its relation to the business system and the society in which it operates, is in its function of supplying short-term financing to business enterprises. When a bank lends money to a business concern, it creates a deposit against which the concern is entitled to draw checks. This action has become universally known as a "commercial loan." Let us ask and attempt to answer these significant questions about this action: What are the theory, the practice, and the purpose of commercial loans? Under what conditions do banks make commercial loans? What is the relation of the bankers' extension of credit to normal and abnormal operations of the business world?

American business and banking practice has built up a general theory of commercial loans which can be summarized in a few words. The commercial loan is short-term credit designed to help finance self-liquidating current business transactions. The commercial bank traditionally has been limited to short-period financing because of the impelling need for the bank to maintain a liquid position. The bulk of its liabilities are demand deposits, subject to withdrawal at the will of depositors, without advance notice. It has been believed to be inadvisable for a bank to tie up any substantial funds in long-term financing ventures which could not be quickly and regularly converted into cash.

The phrase "self-liquidating current-business transactions" has been interpreted to include the following conditions:

1. Financing additions to inventory—raw materials, semifinished, or finished goods — which will be sold and paid for within a period of less than six months.
2. Financing additions to accounts receivable — that is, aiding a concern to extend credit to its customers — which will be paid up in time to liquidate the loan.
3. Financing additions to normal labor pay roll when the results of increased employment will enable the borrower to repay the debt within the typical commercial-loan period.
4. Financing expenditures in anticipation of the receipt of the proceeds of an issue of long-term securities which have been underwritten or guaranteed, and income from the sale of which will be available within the normal commercial-loan period.
5. Financing normal seasonal expansion in business, which promises increased receipts out of which the loan can be repaid.

In short, business concerns are continually called upon to make commitments in advance of the receipt of payment. Factories must invest in raw materials which may not be processed and sold for several weeks or even months. Wholesalers and retailers must buy merchandise before it is sold and paid for. Labor must be employed and paid in advance of the sale of the products it helps make. Some industries experience pronounced seasonal sales fluctuations and require financial assistance during periods of dull business when expenses are incurred in preparation for periods of expanding sales.

These are all legitimate opportunities for commercial loans. The banker asks that they be self-liquidating transactions, that is, that the activity which is financed hold out the promise of yielding an income more than sufficient to repay the loan. He asks that they be current transactions, that is, that they be brought to completion preferably within less than 90 days, and certainly in not more than 6 months. The banker asks that the borrowing concern supply part of its own working capital requirements, that is, that the loan cover only extra or expanding commitments. Only if the borrower is not relying on the bank for a permanent supply of working capital is there the prospect that the loan will be repaid and the bank's assets be maintained in a truly liquid condition.

Permanent working capital cannot be withdrawn from a business enterprise without doing irreparable harm to the business, squeezing its operations, and making day-to-day activity impossible. The banker expects his borrowers periodically, usually following the period of their greatest income, to pay up all outstanding loans and stand clear of the bank's aid.

Safety and Risk in Commercial Banking. Over a long period of years commercial loans have been the largest item in the earning assets of American banks. It naturally follows that the supervision of loan applications and the granting of short-term financial aid to business enterprises is the most important work of bank officers. The task is made both more important and more difficult because, without exception, every loan involves an element of risk. The measure of the risk is suggested by the ever-present possibility of a sharp decline in the market value of securities pledged as collateral for a loan; a parallel decline in the value of inventories purchased out of the proceeds of a loan; a change in administrative policies on the part of the borrowing management; an unexpected contraction of sales and profits experienced by the borrowing enterprise; default by a customer of the borrower, which prevents him from completing planned repayment; or any of a dozen other unforeseen, sometimes unforeseeable, mischances.

The banker cannot operate without assuming risks. Responsible as he is to his depositors for safety, to his stockholders for profits, to his community for commercial service, the banker must choose between risks. He must refuse those risks which threaten to endanger the security of his depositors' funds. Yet he must accept sufficient risk to gain and retain a volume of profitable business for his stockholders.

Careful appraisal and selection of risks requires the accumulation of detailed information about all loan applications. The task of compiling and utilizing this information is usually entrusted to a bank's credit department. An understanding of the practical aspects of commercial loans may be attained through the following description of the work of this division.

Work of the Credit Department. The work of the typical bank credit department has been summarized in the following outline:[1]

[1] Herbert V. Prochnow and Roy A. Foulke, *Practical Bank Credit*, Prentice-Hall, Inc., New York, 1939, pp. 24–25.

I. Obtains and compiles complete credit information.

A. Secures and properly compiles information relative to the reputation, financial standing, and moral risk of the bank's customers, of those business enterprises whose commercial paper is being offered for sale in the open market, and of concerns regarding which inquiries have been received.

1. Investigates the makers of notes its customers seek to rediscount; also investigates endorsers of customers' notes.
2. Makes inquiries at other banking institutions to determine their experience with a customer that has had banking relationships with one or more banks. These are called bank checkings.
3. Makes inquiries at business houses, generally those which have bought or sold merchandise to the bank's customer about which the inquiry is being made. These are called trade checkings.
4. Obtains information from mercantile agencies and from other collateral sources of information.

B. Obtains information covering the various types of collateral pledged as security for loans. In some banks a part or all of the information regarding collateral may be secured and compiled by a separate collateral or statistical department. If the bank has a bond department, helpful information on securities offered as collateral is given by that department.

C. Secures and prepares for suitable use information on a wide variety of subjects helpful in making loans and serving customers, such as business and trade conditions, commodity markets, the inventory position of particular industries, price trends, business practices, and policies in various industries.

II. Reviews and prepares credit information for the use of others.

A. Receives financial statements and spreads them on special comparative statement forms.

1. Analyses of these statements are made for the use of loaning officers. These analyses generally indicate the strong and weak points in the most recent financial statement and the trend of the financial condition over the years.

B. Revises and brings up to date periodically the information and figures contained in the credit folder.

1. With the cooperation of the bank's officers, the credit department asks for financial statements regularly, particularly in connection with those customers that borrow without the specific pledge of collateral.
2. Transfers old material from the current credit files to warehouses or permanent files.

III. Maintains the credit records and files.

A. Maintains a careful record of every credit folder and of all other credit information released to a loaning officer, and sees that the material is returned.

B. Places in the proper credit folders all letters, agency reports, financial statements, newspaper clippings, memoranda, and other useful current information.

C. Supervises the safekeeping and systematic arrangement of all credit records. These records must be kept confidential and available only for those entitled to them.

IV. Provides credit information for various groups.

A. Supplies credit information to the loaning officers of the bank, to correspondent banks, to customers, and to business houses and other outsiders entitled to the information.

1. Answers credit inquiries from correspondent banks, customers, business organizations, and others who write asking for credit information on various names.

2. In large banks with foreign departments, credit information on foreign businesses is obtained for customers interested in selling abroad. Sellers must have some idea of the financial responsibility, paying habits, and the general credit reputation of foreign buyers. Most banks are in a position to obtain this information through central reserve city correspondents or directly from foreign correspondents.

Credit Information. As in the extension of credit by one business concern to another, the bank officer appraising a loan application is interested in both ability to pay and willingness to meet obligations when they fall due. The investigation of ability to meet obligations covers such topics as the financial condition of the enterprise, past business record, trend of sales, expenses, and earnings, outlook for both the company and the industry of which it is a part, and comparison of assets and liabilities, as well as the merits of the specific venture, seasonal activity, or project to be financed wholly or in part out of the proceeds of the loan. An inquiry is also made into the business experience and general reputation of the responsible administrative heads of the borrowing enterprise.

The investigation of willingness to meet obligations examines past experience of creditors in the collection of their claims against the enterprise. The general credit standing of the administrators of the applicant firm often weigh more in the appraising balance than the cash resources recorded on the formal balance sheet.

Sources of Credit Information. A variety of sources of information are drawn upon by the credit departments of commercial banks. Part of the information is available in the bank's file records of past transactions. Part is adduced from current financial statements submitted by the applicant. Helpful information

may be secured from directed interviews with responsible officers of the prospective borrower, examination of plant and equipment, and observation of company morale and relations between executives and employees. Much valuable information is drawn from other creditors, other banks with which the applicant has maintained relations, customers, or trade connections. One of the most useful sources of information is the mercantile agency organized to collect information, compile it, and sell it in summary form to interested parties.

Internal bank records supply information about a customer applying for a loan. From these records can be drawn a history of the customer's account with the bank, covering average past deposits, past loans and payment experience, fluctuations in business activity as revealed by bank deposits, and similar information. This information may be supplemented by complete current financial reports offering detailed statements of assets and liabilities; sales, expenses, and profits; and when compared over a period of years, a suggestion of favorable or adverse trends in balance sheet and operating figures.

Mercantile Credit Agencies. The most complete of all sources of credit information available to bankers are the reports of mercantile credit agencies. The largest of these agencies, Dun and Bradstreet, Inc., maintains current records on every active commercial and industrial enterprise in the country, from the largest to the smallest. The services of this firm will be described in the following paragraphs to illustrate the type and variety of credit information available through the mercantile agency.

The services of Dun and Bradstreet, Inc., may be classified in eight divisions. Each division is engaged in investigating, preparing, and analyzing information concerning various phases of business activity, all directed toward assisting the administration of credit. The eight divisions follow:

1. Credit Report Department. This division investigates and analyzes a continual flow of credit reports on every active business enterprise in the country.

2. Insurance Division. This division prepares special credit reports for fire-insurance companies.

3. Special Service Department. This division gives rapid telephone credit-report service to manufacturers of clothing sold to retail stores.

4. Reference Book Department. This division publishes a summary credit reference book several times a year.

5. Municipal Service Department. This division prepares for investors specialized reports on states, counties, municipalities, and similar borrowing units.

6. Foreign Department. This division gathers and analyzes information on foreign business enterprises.

7. Mercantile Claims Division. This division acts as a collection agency for overdue accounts.

8. Magazine Department. This division publishes a monthly magazine, *Dun's Review*, dealing with business and credit information.

The most significant basic credit information is gathered and analyzed by the Credit Report Department which covers every active business enterprise in the country. An up-to-the-minute report can be delivered in response to a request by any subscriber to the agency service. Banks, manufacturing concerns, wholesalers, and insurance companies are among the enterprises which make frequent and intensive use of the reporting service. A far-flung, experienced staff of investigators and reporters must be maintained to accumulate detailed current information on more than two million business enterprises. The complexity of the reporting service is increased by the rapid turnover of business enterprises. Twenty per cent of all operating firms go out of business each year, and new enterprises are started at a corresponding rate. Bankers and business men need a continuous flow of information about both new and established firms to maintain the administration of short-term finance and commercial credit on a sound foundation.

The Mercantile Agency's Credit-report Department. Reports prepared by the credit department exhibit an amazingly complete coverage of every phase of a concern's operations which might possibly affect its ability and willingness to meet its obligations. Beginning with a history of the concern under examination, a typical report continues with a detailed examination of the business life and success of each of its responsible officers, including all previous and current business connections, and a record of his personal life and habits insofar as they may be connected with his business activity. The report describes in detail the company's method of operation, the nature of its business, and relations with

suppliers and customers. It includes detailed schedules of past and current financial statements, as well as reports of bank and trade comments on the enterprise and its officers. These reports are brought up to date at frequent intervals, supported by new financial data as they are available, and by new comments from trade and banking connections.

Other Mercantile Agencies. In addition to the general mercantile agency, the functions and services of which have just been described, a number of specialized agencies offer credit information. By concentrating on particular trades and areas of business activity, these agencies offer credit information based upon unusually close coverage of firms in related lines of business. Bankers and business men often find it helpful to consult credit analyses prepared by several general and specialized agencies. In this way a composite picture may be formed, and the chance of overlooking vital information is minimized.

Making the Commercial Loan. In the administration of his commercial-loan business, the banker relies on all these sources of information. He realizes the significance of the background history of the enterprise applying for short-term financing. He knows the influence of the skill, experience, aggressiveness, and general ability of the present management. He relies on the broad structure of current credit standing, founded on elements of financial strength or weakness, the rate and manner of borrowing and repayment, and confidential reports of trade relationships. He is intimate with the financial affairs of his customers.

For regular customers, such periodic routine investigation leads to the establishment of a "line of credit." This may be described as an informal statement by the loan officer indicating the limit of commercial loans the bank is prepared to extend during the coming year. It may take the form of a letter to a business enterprise stating the bank's general willingness to make commercial loans to the enterprise during the coming year up to a stated figure. Often the stipulation is added that the borrowing concern shall maintain a satisfactory level of deposits. Such a line of credit should not be regarded as a formal contract governing a projected loan. It tells a prospective borrower, who is a regular bank customer maintaining deposits and requiring seasonal short-term credit, the extent to which the bank is prepared to assist him. For all such accounts, the bank credit department maintains a

complete credit file which is subject to periodic review and restatement of line of credit facilities.

In contrast to this procedure, consideration of a loan application from a newly organized concern, or one which has not maintained regular connections with the bank to which the application has been addressed, will require a searching examination of current and projected financial statements, rigorous investigation of the character and business experience of the responsible executives, and appraisal of the opportunities which the projected venture proposes to exploit.

The Secured Loan. Many loans are made only upon security. The borrower pledges certain collateral as security for his loan; if he fails to repay the debt, the bank may sell the collateral and utilize the proceeds to pay the loan. Collateral commonly utilized for this purpose includes bonds, stock, merchandise in public warehouses, notes and accounts receivable of the borrowing enterprise, real estate, and similar valuable assets.

In making secured loans, the banker commonly looks to five requirements as a basis for appraising collateral: *marketability* (collateral which can be converted into cash easily and readily); *margin* (collateral value well in excess of the loan it secures); *length of loan* (collateral-supported loans fall within the classification of commercial loans and ordinarily are not extended for periods of more than 12 months); *purpose of loan* (while secured loans may be undertaken for speculative ventures which would not form a suitable basis for unsecured loans, the banker may inquire into the proposed disposition of funds); and *relationship to income* (amount of loan should bear a reasonable relation to borrower's income).

ILLUSTRATIVE CASE

The following case history may aid in coordinating this review of commercial-loan practice, and illustrating the banker's use of information from various sources.

The treasurer of the Bestman Textile Company approached the chief loan officer of the Reserve National Bank with a request for a loan of $100,000 for 60 days. Although the Reserve National Bank had on several occasions solicited the account of the Bestman Textile Company, it had never met with success. In requesting the loan the treasurer said that his concern would be willing to make an initial deposit of $25,000, and maintain an average bal-

ance of $20,000. He added that the Bestman Company would be a regular borrower in the future.

The loan officer of the Reserve National Bank thereupon directed the credit department to supply a history of the Bestman Textile Company, together with a review of its current credit and trade position. A summary of the report follows.

History. The Bestman Textile Company was originally organized in 1867. The company was reorganized in 1922 and has been operating continuously since that year. It has been and is engaged in the manufacture of woolen cloth. It has no affiliated companies and no financial interest in any other firms. The officers of the company at the present time are R. A. Follen, President; Arthur Mayfield, Vice President; and D. H. Presbrey, Secretary and Treasurer. All three men have been associated with the company for more than 15 years.

Bank Connections. The Bestman Textile Company maintains accounts in three other banks: The Old Line Bank of this city (present line of credit $100,000); The First Associated Bank of this city (present line of credit $75,000); and the Acme Trust Company of New York (present line of credit $100,000).

Financial Statements. Current financial statements, including an audited balance sheet for the close of the last month and operating statement for the past 12 months follow:

Assets

Cash		$ 26,552.73
Accounts receivable, net after reserves		256,176.80
Merchandise inventory		398,368.00
Total current assets		$681,097.53
Real estate and manufacturing plant	$927,500.33	
Less reserve for depreciation	477,248.00	450,252.33
		$1,131,349.86

Liabilities

Notes payable		$276,000.00
Accounts payable		31,884.81
Total current liabilities		$307,884.81
Capital:		
10,000 shares preferred stock	$400,000.00	
10,000 shares common stock	400,000.00	
Surplus	23,465.05	823,465.05
		$1,131,349.86

Operating Statement

Net sales for past twelve months	$1,285,298.40
Cost of sales	1,177,439.25
Earnings	$107,859.15

Disposition of earnings:

Carried to depreciation	$23,718.15
Reserve for federal taxes	4,628.37
Inventory markdowns	39,384.55
Dividends paid	20,000.00
Carried to surplus	20,128.08
	$107,859.15

Commercial Agency Report

Personnel. The affairs of this company are in the hands of capable and energetic executives, who have been associated with the business for many years. All the officers devote their entire time to the enterprise. They have no outside affiliations.

Financial Information. The company has maintained a reasonably sound financial position since 1923. Statements are audited.

Bank and Trade Comment. Pleasant relations have been maintained with banks The company is well regarded in the trade.

Correspondence With Banks

Old Line Bank

We are happy to reply concerning our experience with the Bestman Textile Company. This concern has maintained a satisfactory deposit balance. Borrowing last year reached a peak of $100,000. Loans now stand at that point. The company has been a regular customer and all noted have been paid when due. We have every confidence in the management.

Acme Trust Company

The company has maintained a satisfactory account with us for a number of years. We have in recent years been extending a line of credit of $100,000, of which the total sum is now outstanding. Borrowings have not been continuous, the company going out of debt for a satisfactory period each year. Good balances have been maintained. Those active in the management are reliable and capable. We have every confidence in them.

Trade Checkings

1. We have a very high regard for this concern. The mill produces a good grade of merchandise and is well thought of in the trade. We are glad to sell it all we can. The account has run as high as $25,000. Bills are always paid promptly.

2. We have received small orders from this mill, receiving payment in 60 days. Would be willing to sell their requirements at any time, for we think, it a sound organization. The officers are shrewd buyers.

3. We sell to this mill steadily and payments are always prompt. Despite unsteady conditions in the industry, this company has maintained a good financial position. The officers are highly regarded. I doubt whether any firm would hesitate to sell their full requirements.

There followed comparative financial statements for the past five years, analyses of trends in the industry, and a report on the trade outlook in the industry for the coming year.

SHORT-TERM FINANCIAL INSTRUMENTS

Some of the important financial instruments and devices used in extending short-term credit will be described in the following paragraphs.

Promissory Note. The financial instrument utilized in the ordinary commercial loan transaction is the promissory note. A promissory note is an unconditional promise to pay a definite sum of money at a specified date. When a business man borrows from his bank, he signs such a promissory note which is evidence of his promise to pay to the bank the amount of the loan at a definite date. The note is legal evidence of the debt. It is a clear and unmistakable promise to make payment at the due date. It carries the name of the one who must pay and the one who is entitled to receive payment.

Open-book Account. Probably the simplest form of short-term credit instrument is known as the "open-book account." This type of short-term credit is commonly employed by a business concern in its relations with its customers and by retail stores selling to consumers who have been granted the privilege of maintaining charge accounts. No special note or written statement is drawn up in these cases. The loan is recorded simply by a notation on the account books of the lender. Thus, a shoe manufacturer selling $1000 worth of merchandise to a retailer who has requested 30 days to pay his bill, extends open-book credit to the retailer. He grants the retailer a loan, in effect, for 30 days. When the retailer pays the bill, the payment is recorded on the books of the manufacturer as a balance to the earlier entry for the transaction. Similarly, when a consumer buys merchandise in a department store and tells the clerk to "charge" the amount of the purchase to his account, the store is advancing short-term credit to the consumer. Ordinarily, a bill is rendered at the end of the month and payment is expected within 10 days thereafter.

Financing through open-book account is very common throughout the business world. It has been estimated that in more than 90 per cent of the transactions between manufacturers and their customers some amount of short-term credit is extended. The credit period usually extends from a minimum of 10 days to a maximum of 90 days. Credit extended for periods of more than

90 days is ordinarily based upon some type of formal note as evidence of the debt. The length of the credit period varies between industries, following custom and the special requirements of the industry. No interest or credit charge is levied on open-book accounts, although a discount is almost invariably offered for payment before the expiration of the credit period. Terms of 2%/10 days, net/30 days are common. Here, a cash discount of 2 per cent off the billed price is offered for payment within 10 days after the bill is rendered. If the discount is not taken, the open-book account is due and payable in not more than 30 days. The costs of extending open-book credit are regarded as part of the seller's costs of operation and are reflected in his basic price schedule.

Draft. A draft may be contrasted with a promissory note in terms of its origin. A promissory note is drawn by the borrower and signifies his promise to pay a stipulated sum at a specified date. A draft is drawn by a creditor in the form of a written order addressed to a debtor requiring the debtor to pay to a stipulated person, or to anyone bearing the draft, a specified sum. If the draft is payable whenever it is presented to the debtor, it is called a "sight draft." If it is payable at a stipulated date, it is called a "time draft." Drafts drawn by one business concern on another are referred to as "trade bills." Drafts arising out of foreign-trade transactions are termed "bills of exchange." Drafts drawn by one bank upon another are known as "bankers' bills." If a time draft is presented to the debtor who acknowledges its validity by writing across its face the word "accepted," the date of the acceptance, the place of payment, and his signature, the draft becomes a "trade acceptance." The distinguishing feature of the trade acceptance is that it stands as a promise to pay, signed by the creditor.

Trade Acceptance. As a usable short-term credit instrument, the trade acceptance may be contrasted with the open-book account. The trade acceptance is a negotiable instrument;[1] the open-book account is nonnegotiable. The trade acceptance is a written promise to pay; the open-book account is an indefinite statement by the creditor, limited to an entry on his own accounting records. Trade acceptances may be readily discounted (that is, sold to a bank which purchases at a slight discount from the

[1] A negotiable instrument is one that can be bought and sold freely and with safety, so passing readily from one person to another.

face value); open-book accounts are discounted only with difficulty, and at a substantial deduction from stated value. American business men have been regrettably slow to popularize the use of the trade acceptance as a substitute for the older and more informal open-book account.

Commercial Paper. The term "commercial paper" is usually reserved for promissory notes sold to banks and other investors. Note brokers or commercial-paper houses act as middlemen in these transactions. The note broker sometimes buys the commercial paper from the issuing concern and sells to banks and other investors at a higher price, covering expenses and securing a profit from the margin between purchasing price and selling price. At other times the commercial-paper house undertakes to sell the notes on a commission basis.

The use of commercial paper in this way is generally limited to well-established enterprises of tested financial strength. Note brokers sell such paper throughout the country, thus enlarging the area and multiplying the sources from which a firm may secure short-term financing. Commercial paper is commonly sold in units of from $2500 to $10,000, and for periods of from 3 to 12 months. Interest rates are determined by the strength of the borrower's credit standing and general financial conditions throughout the country.

Finance Companies. Among the other sources of short-term credit, some mention should be made of finance companies which specialize in the purchase of accounts receivable. Frequently a concern may be in so weak a credit position that it is unable to secure a commercial loan, yet be carrying on its books a large volume of accounts due from customers. Finance companies advance money against receivables as security. Business concerns resort to such loans only under special strain, for interest rates must be higher than for commercial loans to compensate for the greater risk.

FINANCING CONSUMERS

Discussion of short-term credit would not be complete without some consideration of financial aids to ultimate consumers purchasing in retail stores. Mass production depends on mass distribution. Mass distribution requires mass markets. But selling to mass markets necessitates the extension of credit which makes it

possible for the millions of consumers to buy the products of industry. Out of the discovery of the need for providing consumer credit has grown a variety of devices and institutions designed to make short-term financial assistance available to consumers. We now recognize that consumption must be financed by credit extension. We have discovered that consumer credit can be provided safely and profitably.

Open-book Credit. The most familiar type of short-term consumer credit is based upon the use of charge accounts. This is simply the familiar business practice of selling on open-book account, the debt unmarked by formal documentation, recorded only as an entry on the books of the retail store. Open-book credit provides an easy and convenient method for paying bills. It removes the need for carrying cash into stores and aids consumers to match monthly payments against the receipt of income.

Installment Credit. Installment credit moves one step beyond open-book credit. It substitutes a written sales contract for the informal undocumented charge account, a cash down payment and an extended predetermined series of payments for the lump-sum end-of-month settlement in full.

The history of installment credit can be traced through centuries of use. It was introduced in the United States early in the nineteenth century to aid consumers to purchase furniture. It is only since 1920, however, that installment terms have become a common selling device for almost all types of merchandise. In recent years, more than one-third of all retail sales have been made on a credit rather than a cash basis. Of all credit sales, approximately two-thirds are on open-account and one-third on the installment basis.

The bulk of installment credit — approximately half of all all installment sales — is concentrated in the automobile business. Furniture and household appliances utilize installment credit to expand the consumer market. Within the past decade, even clothing, traditionally excluded from installment credit, has been sold on extended-payment plans. The contribution of installment credit to enlarging mass markets may be gauged when we remember that in September, 1941, a first attempt was made by the Federal government to curtail installment credit. The step was undertaken as a measure to *decrease consumer purchasing*, thus inhibiting rapid price advances and aiding factories producing consumer goods to transfer to production of munitions.

A number of problems arise in connection with the administration of installment credit. In order to protect the seller, the installment contract ordinarily provides either that title (ownership) remains with the seller until the payment of the final installment, or that title reverts to the seller in the event of the buyer's default on any installment when due. As a further protection, sound administrative practice requires the collection of a substantial cash payment at the time of purchase. This gives the buyer an interest in continuing payments as long as possible. Sound administrative practice also limits the credit period so that the resale value of the merchandise is always in excess of the unpaid balance due the seller.

Consumer Loans. Facilities and agencies have also developed to aid consumers by direct loans. Consumers may borrow to meet accumulated bills, pay for medical services, education, taxes, or other current expenses calling for lump-sum cash payments.

Among the institutions making direct consumer loans, the oldest in terms of historical development is the pawnbroker. These agencies, now licensed and supervised, lend money on the basis of pledged security, which usually consists of jewelry, clothing, or other personal possessions. Goods are forfeited to the lender if payments are not made when due. The risks attending the extension of this type of credit are great, and interest rates are correspondingly high.

Other institutions in the consumer-credit business include various types of personal-finance companies. Some lend only on security pledged as collateral (frequently in the shape of real estate, furniture, and other household goods). Others require no security, extending so-called "character loans." Sometimes co-makers' signature are required; the co-makers are responsible for paying the notes, if the original signers default. Many of the commercial banks have entered the consumer-credit field through newly opened small-loan departments.

Investigation costs and service charges are substantially higher in the consumer-loan business than in commercial loan transactions. Interest rates reflect the added costs and the heightened risk of loss. Whereas business enterprises often borrow from banks at interest rates of 6 per cent annually, or less, consumer loans are often made at interest rates (including service charges) of from 12 to 18 per cent.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What assets make up the working capital of an enterprise?
2. Name some types of enterprises which require a relatively small supply of working capital.
3. What are the principal sources from which a firm may derive its working capital?
4. What is the most common source of working capital?
5. List the principal functions of a commercial bank.
6. Define briefly the commercial loan.
7. To what conditions will the phrase, "self-liquidating current-business transactions," apply?
8. What is the most important work of bank officers?
9. What is the choice between risks which a banker must make?
10. What two elements interest the bank officer appraising a loan application?
11. Name four sources of credit information.
12. Which enterprises make the most frequent and intensive use of the reporting service of Dun and Bradstreet?
13. Define the phrase, "line of credit."
14. Name some common collateral for short-term loans.
15. What is a promissory note?
16. Distinguish the sight draft from the time draft.
17. Of what significance is the fact that a trade acceptance is negotiable?
18. If a concern is in such a weak credit position that it cannot secure a commercial loan, but yet it is carrying on its books a large volume of accounts receivable, from what source may it sometimes obtain the desired loan?
19. Of all credit sales what proportion is made on an open-book basis and what proportion on an installment basis?
20. Name four sources from which consumers may obtain loans.

B

1. What is the major source of the funds of commercial banks? Why must the officers of such banks be particularly careful about the kinds of investments which they authorize?
2. Do you think that commercial banks' investing activities are currently operating at a high or low level? Why? What effect will this have on the interest rate for capital?
3. Will it have any effect on the general price level? What?
4. To whom do the officers of a commercial bank have responsibilities? What are these responsibilities?
5. What effect does the size of the interest rate which commercial banks charge for short-term loans have on marketing costs? Explain.
6. Will it make any difference to a commercial bank contemplating a loan whether or not its prospective borrower maintains good working conditions for its employees and in general enjoys amicable relations with them? Why?

7. What bearing will the current ratio on the balance sheet of the prospective borrower have in determining whether or not to make a loan?
8. In 1931 would you say that the interest rate charged for loans was high or low? What were the conditions of supply and demand for capital? Why?
9. What cautions should a bank observe in buying trade acceptances? Is there usually any exchange of currency when a bank buys a trade acceptance? If banks all over the country buy commercial paper freely, what effect, if any, will it have on the general price level? Why?
10. Compare the position of a consumer buying goods on the installment plan with the position of a business man borrowing money from a commercial bank. Are they the same? What precautions should each take? What effect will an extension of buying on the installment plan have on the general level of prices?
11. Compare the position of a seller selling goods on the installment plan with the position of a commercial bank lending money to a business man. What precautions should each take?
12. Does the fact that one-third of all retail sales have been, and are, made on credit have any influence on the costs of marketing? Does it have any bearing on the general problem of inflation? What?

C

1. Write a short history of the development of commercial banking in the United States.
2. Attempt to itemize the purchases which you and your family have made in the past six months. What proportion of them has been cash purchases? What proportion has been made on open-book credit? What proportion on the installment plan?
3. How many different kinds of banks do you have in your home town? List each of them. How do their functions or operations differ? Which type of bank is most likely to be prosperous currently? Why? Which type of bank would you prefer to deposit your money in? Why? Which type of bank would you prefer to borrow money from? Why?

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CHAPTER 24

PUBLIC FINANCE

We often overlook the significance of public finance in its relation to the economic world in which we live. Government is accepted as a necessary evil, and taxing and spending as its inevitable accompaniment. When we are aware of the burden of taxes, we grumble. When we benefit from spending, we rejoice. Constantly we ignore the fact that every phase of public finance is inextricably related to the everyday functioning of the business world. There is no tax and no item of expenditure which does not contribute to the changing pattern of the economic life of our society.

The present chapter will be devoted to a discussion of the nature of public finance and its relation to the business world. It is founded on the principle that no true understanding of the problems of private finance in a capitalistic society can be attained without considering problems of public finance and observing how they affect and are affected by private financial policies.

PRIVATE AND PUBLIC FINANCIAL RELATIONSHIPS

As the term is commonly used, "public finance" refers to the financing of government. It includes the administration of expenditures and the raising of funds through taxation and borrowing. It is immediately apparent that public finance is related to the entire business economy, to every individual in the society, and to changes in the general level of business activity. Government borrows money which individuals and business enterprises have saved. Government taxes individuals and business enterprises. And when government spends money the recipients are individuals and business enterprises. Public finance is an integral part of the general circulation of goods, services, and money which is the lifeblood of our economy. Everyone contributes in some way to the support of government, and everyone benefits in some way from its services.

Certain distinctions may be drawn between private finance and public finance. Private business operates primarily to make

profits. It sells goods and services for the specific objective of earning a return on invested capital. Its ends are clear and the validity of almost every expenditure may be appraised in terms of the income secured therefrom. Government, on the other hand, is organized and maintained for the welfare of society as a whole. Its objective is rendering service, rather than securing profits. Many of its expenditures, such as the costs of building roads, erecting and supporting schools, and maintaining military, fire, and police protection, cannot be appraised in terms of the profits they yield. Often there is no profit, as the business man understands the term. The benefits may endure for several generations. Frequently they are so intangible as to defy measurement. Who can calculate the monetary value to the citizens of the United States of the establishment and support of a system of universal, free, compulsory education?

And yet in public finance, as in private finance, we encounter good and bad administration. The after effects of stupidity, waste, and dishonesty are as visible in one as in the other. They are complementary throughout the social system. We have already observed the necessity of a protective governmental framework for the operation of private business. To some extent they are competitive, as in the supply of electricity, gas, water, and power. Both draw upon the same supply of private savings. Both compete for goods and labor power.

Public Business and Private Business. It is difficult to distinguish those activities which are clearly public business from those which clearly belong in the area of private business. The line of historical development is of little help, for we soon discover that almost every function now allotted to public business was at one time carried on by private business. Even the provision of military, police, and fire protection was not always under governmental administration. Before they entered the public domain, armies, police, and firemen were maintained by private business, if not directly for a profit, then indirectly in order to permit and protect profit making and security in production and trade.

In the modern capitalistic, private-enterprise economy, however, certain functions are by general agreement performed by governmental divisions. Other functions are reserved for private business. And there remains an intermediary ground where private business competes with public business, as in the supply of educa-

tion. Among the functions which are generally assumed by government acting in the realm of public business are the following:

(1) Security, both external and internal, and involving outlays for military, police, and other protective services; (2) justice, or the settlement of disputes; (3) the regulation and control of economic enterprise, including such services as coinage, weights and measures, the regulation of business practices, and State ownership and operation of certain enterprises; (4) the promotion of social and cultural welfare, through education, social relief, social insurance, health control, and other activities; (5) the regulation of moral standards through the control of traffic in drugs, the sale of alcohol, gambling, prostitution, and other antisocial practices; (6) the conservation of natural resources; (7) the promotion of the unity of the State by such devices as the control of transportation and communication; (8) the administration of government and the support of public officials; (9) the administration of government financial systems, or expenditures, revenues, and fiscal control; (10) and, occasionally, religion.[1]

These functions may be summarized as social actions for the public welfare.

Federal, State, and Local Interests. Public business is itself divided between the several divisions of government: federal, state, and local. This distribution is in part the result of convenience, in part of economy in performance, in part of local jealousy and "state-rights" feeling. Ordinarily defense against aggression has been regarded as a function of the central government; police and fire protection are allocated to local governmental divisions. Education is still generally regarded as of local significance, although it is moving into broader spheres with state and federal support. In recent years a clearly defined tendency has been observable for the enlistment of state and federal interest in business once regarded as primarily local in character.

Growth of Public Expenditures. The expenditures of governmental divisions have increased with every passing decade. Public business today has attained proportions beyond the dreams of our ancestors. The causes for this growth may be discovered in the economic, social, and political forces which lie just under the surface of our daily lives.

1. *Changing Living Standards.* The trend of living standards through the centuries has been steadily upward. The rise in the provision of comforts and luxuries in private life has been accompanied by an insistence on the provision of greater comfort and

[1] Alfred G. Buehler, *Public Finance*, McGraw-Hill Book Company, Inc., New York, 1936, p. 15.

security in public life. The modern community demands public sanitation, safety, better roads, and elaborate public buildings to match the elevation of private living standards.

2. *Business Cycles.* The prosperity-depression fluctuations of the business cycle create disequilibrium and social distress — particularly in periods of widespread unemployment there is a demand for the extension of social relief. In addition to direct expenditures for the support of the unemployed and their families, there is growing pressure for governmental sponsorship of public works as a device for stabilizing business. Of increasing significance is the belief that with the decline in private investment (as private business increasingly adopts the policy of financing expansion out of earnings rather than by borrowing from individuals and institutions) government must increase its spending in order to utilize accumulated savings.

3. *Rising Price Levels.* The general upward trend of basic prices since the eighteenth century has contributed to the increase in public expenditures. In periods of advancing prices, governmental divisions find their normal expenses increased, even when their activities are maintained at the existing level.

4. *Social Changes.* Parallel to these economic changes must be listed certain developments in social organization. The increase in national population and the concentration of population groups in metropolitan communities have thrust upon governmental divisions an increasing burden of expense. Traffic, crime, poverty, and many other mass-industrial problems contribute to the growing budget of public business.

At the same time, the advance of social thought has demanded the extension of government activity. Education has become an accepted public responsibility through the collegiate level. Care of the unemployed, provision of recreational facilities, adult vocational training, protection and maintenance of public health, care of the incompetent and the aged have all been transferred from haphazard or private care to the area of public business. Whatever such a transfer may gain in heightened service and efficient performance, it makes a direct contribution to the level of public expenditures.

5. *Political Changes.* The growth of strong, integrated nations since the sixteenth century has also been an influential factor in increasing governmental budgets. Strong states assume more

responsibilities than weak states. The power of the masses in the democratic state forces upon government the sponsorship of a multitude of social services. Every increase in public service must meet its bill of costs.

In various ways and for various reasons, therefore, public wants have multiplied. In response to this demand — economic, social, and political — governmental expenditures have increased steadily. A critical review of the trend suggests that many of the services do not justify their expense. But we must remember that it is easy to initiate services, difficult to terminate them. Those who benefit from their existence and those who find employment in their performance have an interest in their continuance. Spending once begun is stopped only with the greatest difficulty. What at first is looked upon only as mildly desirable ends by being regarded as a social necessity. This situation is reinforced by the problems which arise when any attempt is made to measure the benefits of public services against the costs of providing them.

PUBLIC EXPENDITURES •

Further insight into the social significance of public expenditures may be gained from a more detailed examination of the objects of federal, state, and local governmental spending.

Federal Spending. Federal expenditures have shown a continuing tendency to increase relative to total expenditures. This trend is the result of two forces, the first the general increase in total public expenditures, the second the transfer of functions from local and state to federal jurisdiction. In recent years, the latter tendency has been revealed most clearly in the federal assumption of the relief burden.

Examination of the objects of federal spending discloses the dominant position of spending to maintain public security. Support of the Army and Navy is the heaviest annual charge against federal income. Added to this burden are charges for interest on debt and redemption of debt. In large part these debt charges represent the costs of previous wars for which this nation is still paying. Further military expenditures are reflected in payments to veterans for care and pensions. These payments continue for generations after the war in which the responsibility was created.

Among the other functions of the Federal government which

claim important segments of the total annual expenditure are the following: aid to industry and commerce, aid to agriculture, general operation of government divisions, grants for highway construction, grants in support of local education, conservation and food relief, and aid in public construction and unemployment relief. The importance of the last of these functions grew enormously during the great depression which began in 1930. Billions of dollars were spent on vast public-works programs designed to support the unemployed and renew the springs which generate private business activity.

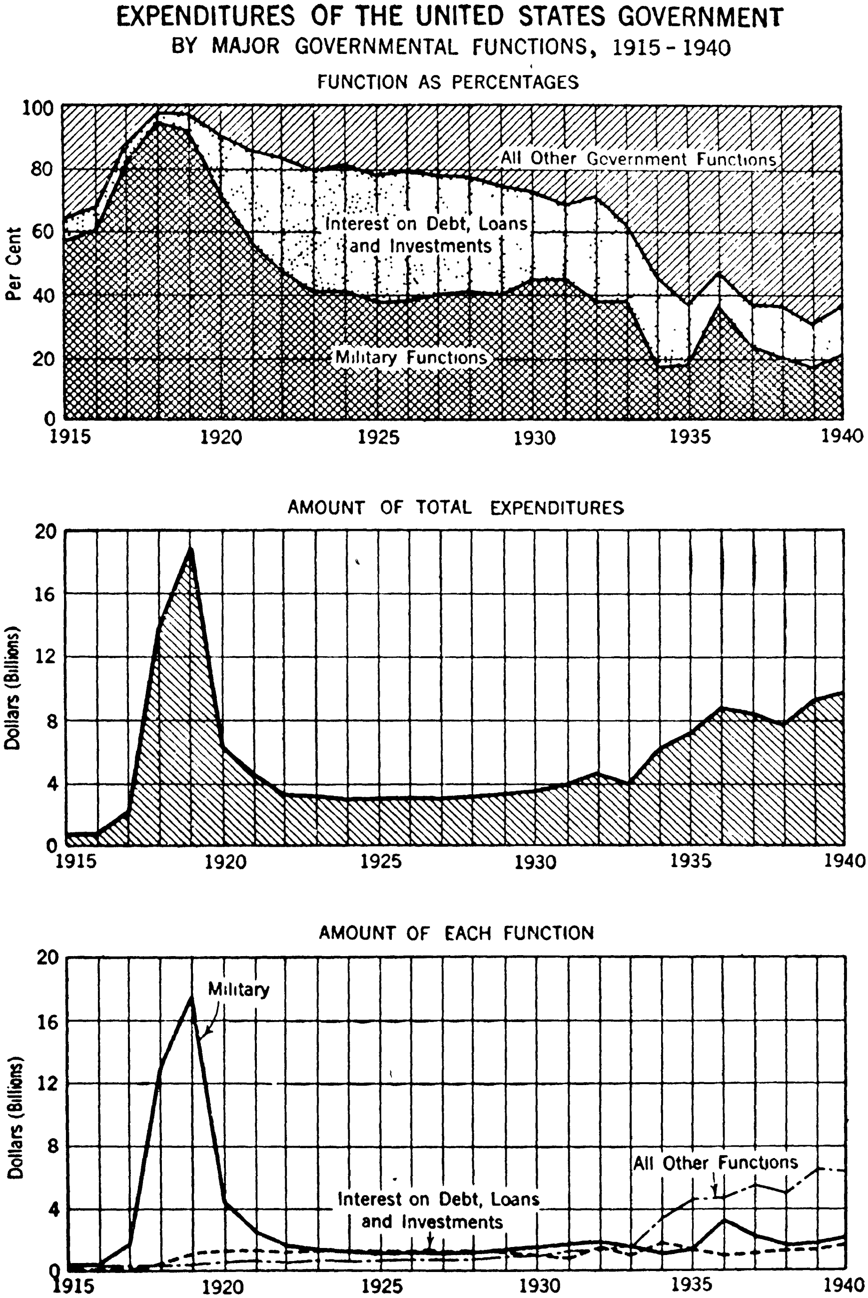
Spending for defense and security increased to unparalleled levels in 1940 and 1941 with the initiation of the rearmament program. Within the space of a few months, more than 50 billion dollars were appropriated to finance rearmament.

Current trends suggest a continuing increase in the relative importance of federal spending. New responsibilities have been assumed in connection with the care of the aged and the unemployed. No one can predict the end of spending for national security. The readjustment of American industry to a peacetime economy at the close of the present crisis in international relations will undoubtedly throw fresh burdens on the Federal government, which may call for expenditures equal to, if not in excess of, those incurred during the depression. There is reason to expect a continuance of the transfer of functions from local and state to federal jurisdiction.

State Spending. Support of the school system, highway construction and maintenance, and support of hospitals and corrective institutions assumed the most important positions in state expenditures. Of lesser significance, though still important in terms of the number of dollars spent, are payments for personal and property protection, development and conservation of natural resources, maintenance of general government staffs and activities, and health and sanitation.

Many of these items are still in the period of rising expenditures. The several state governments are extending their supervision over local police activity. State police divisions have been established, and their duties have been rapidly increased by widespread automobile ownership and the improvement of highways. Appropriations for the support of state-operated hospitals and corrective institutions have kept pace with the increase in other expenditures. Inasmuch as the cost of caring for the sick and the helpless and

CHART 30

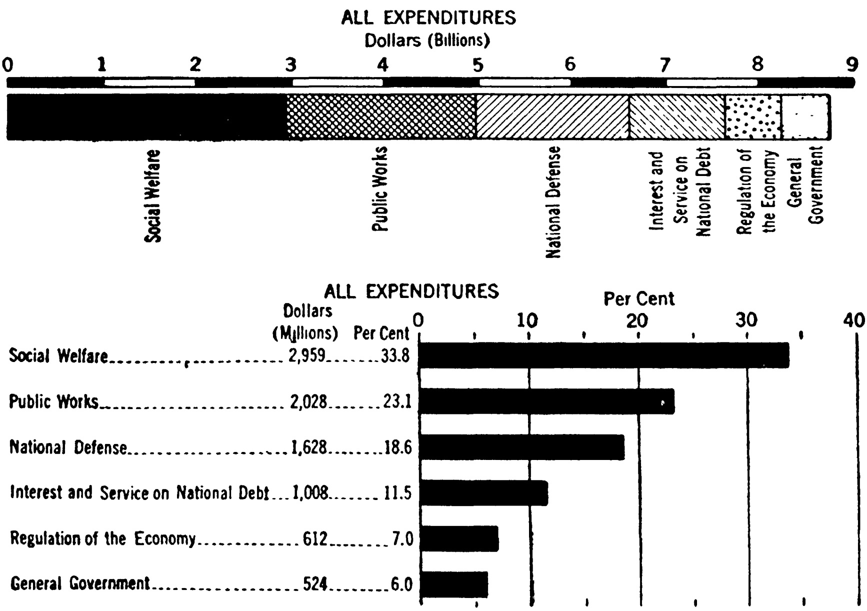


SOURCE: Temporary National Economic Committee, *Taxation, Recovery, and Defense* Monograph 20, U. S. Government Printing Office, Washington, 1940, p. 59.

maintaining agencies for the prevention and punishment of crime appears to rise in direct relation to population increase, transportation improvement, wealth accumulation, and urban congestion, expenditures will probably continue to be a significant part of state budgets. Expenditures for education have outstripped population growth. Popular recognition of the vital relation

CHART 31

EXPENDITURES OF THE UNITED STATES GOVERNMENT
BY FUNCTION, FISCAL YEAR ENDING JUNE 30, 1939



SOURCE: Temporary National Economic Committee, *Taxation, Recovery, and Defense*, Monograph 20, U. S. Government Printing Office, Washington, 1940, p. 67.

between education and the maintenance of rigorous democratic institutions has supported and approved the increase. Schools and their equipment have multiplied and improved, teachers are better paid and teaching loads have been reduced, and at the same time the educational period has been lengthened to keep pace with the economic demand for special training at advanced levels. The depression and state assumption of the social costs of the industrial system have brought increased burdens to state governments in the form of old-age assistance and unemployment insurance.

Local Spending. In recent years expenditures by local governmental divisions have exhibited a tendency to decline relative to state and federal expenditures. This development can be traced to the transfer of functions to larger political divisions and the exhaustion of sources of revenue available for exploitation by local governments.

Major beneficiaries of spending by local governmental divisions are schools, protection (police and fire), health and sanitation, charities, hospitals and corrective institutions, and the maintenance of general government staff and services. It should be obvious that the growth of large cities contributes directly to the increased cost of performing these functions effectively and to the necessity for assuming additional protective functions incident to population concentration.

The Benefits of Public Spending. This review of the purposes of spending by governmental divisions suggests the difficulty of appraising with accuracy the benefits of public expenditures. Consideration must be given to immediate and long-range effects. Thus separated, the end products may be different. Consideration must be given to measurement of returns in terms of broad social benefits. These may be as real as the profits of private enterprise, yet may defy exact appraisal of costs versus results. Some government activities aid business directly, as in the maintenance of a sound monetary system. Others provide a favorable setting for the operation of private enterprise, as in the establishment of a "safe" society, under the protection of police and with open access for all to courts of impartial justice. The whole range of governmental service may be regarded as necessary to the preservation of our society as we know it. When results cannot be measured in terms of dollars of profit, who is to say that costs are excessive?

Further difficulty is encountered when we appraise the economic effects of public spending. Governmental expenditures put money into circulation, create employment, often create wealth, aid business indirectly by protecting its activities, and, in addition, assume a large part of the social burden of the unemployed, the sick, and the incapable. Public spending in a period of business depression is utilized to help start the wheels of industry. All business, all social life, is affected by the volume and direction of public expenditures. The effects may be traced even to the redistribution of

incomes, since money taken by taxation from the wealthy may be used to offer social services and facilities to the poor. The moral is implicit that unless some control is exercised over both the volume and the direction of public expenditures, the economic and social effects may be undesirable or even inimical to the profitable operation of private business.

Controlling Public Spending. What types of control can be utilized? What agencies should utilize these controls? How can public spending be directed toward necessary and desirable ends without becoming wasteful or unremunerative?

No simple answer can be given to these questions. Control of public expenditures is not merely a problem of economic limitations. It is a political problem which must be worked out in terms of group pressures and special interests in positions of strategic power. To some extent it is also a problem of mass education. The majority of the voters must realize the significance of social needs and must have a grasp of sources and spending of public funds sufficient to permit them to appraise the financial activities of local, state, and federal governmental bodies.

The ability to raise funds by means of taxation is the ultimate control over public spending. Within this limit proximate controls consist of the development of sound budgetary procedures, the elimination of graft, and the limitation of popular demands on the services of government. It is widely agreed that no control can be effective unless the mass of the voters take an active interest in public business. Responsible officials are disposed to be lax when they are convinced that the public cares little what happens to public funds. Extension of the understanding that economic and social health are closely related to public financial policies appears to be the only way to eliminate ill-judged expenditures and to force the balancing of every dollar of expenditure against a standard of social benefit.

MEETING THE BURDEN OF PUBLIC SPENDING THROUGH TAXATION

Governmental divisions secure funds from two principal sources: taxation and borrowing. Revenues secured by borrowing do not form a permanent foundation for public spending. Loans must be repaid. Therefore the bulk of government revenues *temporarily*, and all revenues *permanently*, must be secured from taxation.

General Definitions. A tax may be defined as a compulsory payment for the support of governmental activities. A tax is not a price paid by an individual or business enterprise for benefits received. Tax payments may bear little or no relation to actual benefits received by taxpayers. Citizens without children are taxed to support free education. Neither should it be assumed that a tax is levied in relation to ability to pay. Property owners may be called upon to pay taxes, regardless of their ability. Finally, the definition of a tax as a compulsory contribution for the support of governmental activities should not lead to a belief that taxes are levied for revenue only. Public bodies frequently use taxes for regulatory purposes without regard to the revenue they may produce. The use of regulatory taxes falls within the general limits of our definition.

The Terminology of Taxation. Some familiarity should be established with the important terms of tax discussions. We may speak, for example, of "progressive," "proportional," and "regressive" taxes. A tax is described as progressive when the rate increases as the tax base increases. Thus, most personal income taxes are progressive in that the tax takes a small proportion of low incomes, and an increasing proportion of larger incomes. A tax is described as proportional when the tax rate is uniform for any tax base. An income tax which would claim the same proportion of all incomes would be proportional. A tax is described as regressive when the rate decreases as the tax base increases. A regressive income tax would claim a large proportion of small incomes and a smaller proportion of large incomes. Personal income taxes are usually progressive. Property taxes are usually proportional. Few taxes are designed to be regressive in character, although a general sales tax imposing a levy of 2 per cent on all retail sales might be termed "regressive" in its effect, because it would bear more heavily on the poor, who spend all their incomes on necessary commodities, than on the wealthy, who save a large part of their incomes. A sales tax on luxury goods avoids much of the regressive character of a general sales tax.

A further distinction may be drawn between *direct* and *indirect* taxes. In common usage, a direct tax is paid by the one from whom the tax is collected. An indirect tax is one which is shifted to others. A personal income tax is a direct tax paid by the individual upon whom it is imposed. A gasoline tax is levied on the

merchants who sell gasoline, but is commonly passed along to motorists as an increase in the price of gasoline.

Principles of Taxation. The great English political economist, Adam Smith, in his *Wealth of Nations*, 1776, laid down certain principles of taxation which are still of interest to tax students and business men.

> The subjects of every State ought to contribute toward the support of government, as nearly as possible in proportion to their respective abilities: that is, in proportion to the revenues which they respectively enjoy under the State.
>
> The tax which each individual is bound to pay ought to be certain and not arbitrary.
>
> Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it.
>
> Every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings into the public treasury.

Modern writers on taxation have restated and summarized these principles in the light of current practice. The first of these is often referred to as the "principle of productivity." A sound tax policy is designed to produce the greatest yield consistent with the maintenance of the supply of revenue (that is, avoiding a tax rate so high as to wipe out the source of revenue), and the avoidance of the temptation to evade the tax.

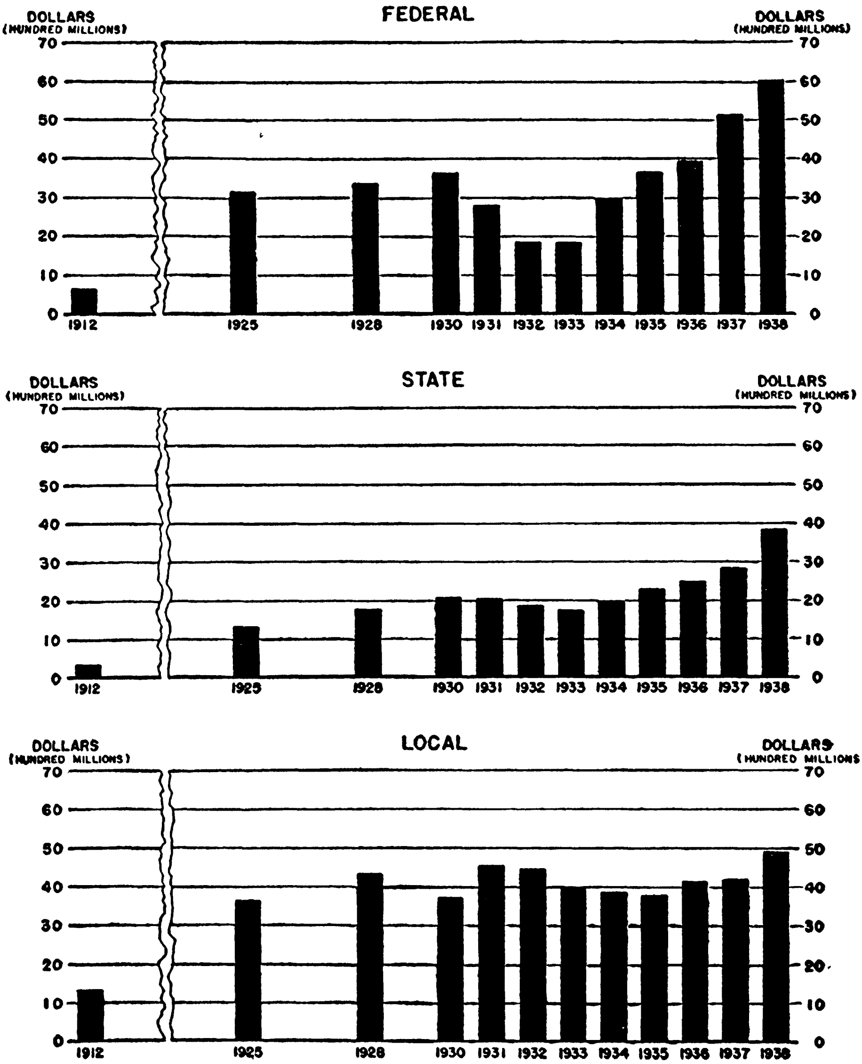
A second major principle recommends a broad diversity of revenue sources. It is difficult to imagine a single tax so far-reaching as to secure sufficient revenues to maintain modern governmental activities and, at the same time, spread the tax burden equitably among all potential taxpayers. A high rate of taxation, levied against a single tax base, is an invitation to widespread evasion. Thus, a sound tax structure is usually composed of a diversified array of taxes, direct and indirect, based upon income, property, commodities, and other tax objects. If not carried to extremes, such a diversity helps to increase the total yield without imposing unconscionably stiff rates in any individual tax schedule, spreads the impact of taxation, and contributes to a universal participation in the support of government.

A third principle urges elasticity of revenue yield. The needs of governmental bodies change from time to time. Social relief in depression periods, the necessity to support a defense program or to finance war, call for a sudden increase in expenditures. A sound

CHART 32

TAX COLLECTIONS IN THE UNITED STATES

SELECTED FISCAL YEARS BY LEVEL OF GOVERNMENT 1912 - 1938



SOURCE: Temporary National Economic Committee, *Taxation, Recovery and Defense*, Monograph 20, U. S. Government Printing Office, Washington, 1940, p. 85.

tax system should be adaptable to planning and control. There should be a margin for expanding revenues derived from existing taxes (by increasing income-tax rates, for example), while certain taxes, such as levies on general sales, may be reserved for periods of extreme emergency.

At the same time, a fourth principle calls for the maintenance of simplicity in the tax structure. Simplicity aids both taxpayer and collector, eliminates unnecessary collection expense, and minimizes failure to pay due to inability to understand.

A fifth principle calls for convenience in payments. Convenience should be understood as applicable to analysis of the position of both taxpayer and government. The taxpayer should be called upon to make payments at periods related to his own receipt of income and normal accounting procedures. The government should receive income in a regular flow which makes possible careful financial planning.

Finally, a sound tax structure should endeavor to apply these principles justly. It should not bear with undue rigor on a special class or group. Insofar as possible, all should share the common burden of state support. Only as this condition is attained is there a hope of securing that degree of popular interest in the financial administration of government which is necessary to insure the absence of graft and waste.

TYPES OF TAXES

Specific tax programs are enacted with greater or less adherence to these principles. To understand their application and to aid in grasping their significant relationship to the world of business, we may examine the major types of taxes levied by local, state, and federal governmental divisions.

The General Property Tax. The major support of local town, city, and county government is the general property tax. This is a tax levied upon houses and land, and in most states upon personal belongings as well. The general property tax is levied at a uniform rate upon all property, presumably appraised at its true value.

One major difficulty in the equitable administration of the property tax is readily apparent. How is the true value of property to be established? The common assumption is that the value for taxation reflects what the property would bring in a fair sale. But this is not easy to determine, and sale value fluctuates rapidly.

As a result inequalities are admittedly present in every valuation schedule.

Another difficulty is encountered in dealing with such personal household property as jewelry and securities which are easily hidden and so evade appraisal. An individual can evade the impact of the tax by moving into an adjoining governmental division with a lower tax rate. Inequity and evasion have become so widespread as to create a general disrespect for the property tax system as a whole.

Following their examination of these difficulties, many students of public finance have concluded that of all types of taxes the general property tax is the least equitable and the one most susceptible to evasion. Its continued use from earliest colonial times is attributable to expediency. Certainly it violates the principle of taxing with reference to ability to pay and accords poorly with the principle of taxing in proportion to benefits received. The ownership of property is not necessarily accompanied by ability to pay taxes. At the same time, property owners seldom share in the benefits of public expenditures in proportion to the valuation of their property holdings. Visible property is taxed at the expense of intangible property which is readily hidden. Small property holders are likely to feel the burden more heavily than large property holders and ordinarily possess a smaller proportion of intangibles. The property tax may, therefore, be viewed as regressive in its effect. In many localities it discourages home ownership.

Proposals for reform usually recommend a classification of property into tangible groups with varying tax rates. Often it is urged that intangibles be exempt from taxation because of the ease with which such a tax can be evaded. Further recommendations look to efforts to remove inequalities in assessed valuations. All such plans recognize the fundamental objection to this type of tax the maintenance of which is justified largely in terms of the difficulty of finding any other taxable object capable of yielding an equal volume of revenue for the support of necessary local governmental activities.

Inheritance Taxation. Inheritance taxes are levied on the value of property received by heirs following the death of property owners. They form a significant part of the revenue of state and Federal government.

The common justification for this type of tax is ability to pay.

This principle does not apply with uniform justice, since the tax ignores the cash holdings of the heir which reflect directly on the ability to pay taxes. Social reformers support the tax, however, as a device for preventing the accumulation of property through several generations and so forcing some redistribution of concentrated wealth. In this connection, it should be noted that most people leave little or no property at death. Inheritance taxes are levied on a very small part of the population.

Commodity Taxation. Commodity taxes are met under a variety of names. "Customs duties" are imposed on imports and exports. In contrast to these, "excises" are domestic commodity taxes which may be imposed at the various levels of production, marketing, or consumption. Excises may be imposed upon both sales and purchase or use. One variety of excise tax is known, therefore, as a "sales tax." A sales tax may be either general, applied to all commodities, or specific, applied only to selected commodities.

Within the past decade commodity taxes have increased in significance in the American tax structure, particularly in state and federal revenues. They have been utilized primarily to increase public income. For this purpose they have been resorted to with growing frequency in depression years when revenues from other tax sources have dwindled. They have also been utilized to regulate the sale and consumption of certain products. In this category may be included taxes on oleomargarine, drugs, and liquor. Finally, commodity taxes have been useful in protecting selected business groups, as in the employment of taxes against chain stores as a device to weaken their competitive attack on the position of independent merchants.

Based upon the record of commodity taxation, certain observations on their use and application may be formulated. It is often alleged that commodity taxes are to some extent inequitable. They are frequently shifted by manufacturers, middlemen, and retailers to ultimate consumers. Insofar as this is accomplished, they are levied in proportion to consumer spending. No allowance is made for consumer income (particularly with reference to that portion which is saved). Nor do they compensate for dependents or other charges against consumers' income. In short, it is charged that they bear more heavily on the poor than on the wealthy and are regressive in character.

If they are not shifted to ultimate consumers, they are borne by business concerns in proportion to their sales. Yet variations in sales do not necessarily reflect variations in profits. Some injustice may be encountered, therefore, even in the business application of the tax.

Like so many other taxes which are levied with little regard for either ability to pay or benefits received, commodity taxes of all kinds are justified in terms of expediency and ease of collection. They extend the burden of the tax system to many who might otherwise escape property, inheritance, and income taxes. Because they are paid in small amounts, following purchases, they are relatively painless and less likely to provoke revolt than corresponding charges directly against property or income. Opposition is further reduced by the policy of avoiding the imposition of the burden of commodity taxation on the necessities of life, or by taxing luxuries at a higher rate. In general, commodity taxes have been resorted to, particularly by state governments, as the property tax has weakened. The truth of this observation can best be tested by the growth of state general sales taxes in the depression years following 1930. Few pretended that they were anything but regressive in character. But they have been supported by tax-burdened property owners and have been accepted as necessary income-producers in periods of financial emergency.

Protective Tariffs. Further comment should be added in connection with that class of commodity taxes known as "customs duties" or "tariffs." These are ordinarily levied upon imports as they enter this country. Although they still contribute to the revenue of the Federal government, they are used largely for the protection of American industries. The history of protective tariffs can be traced back to the mercantile system which restricted imports by such taxes in order to protect home industries from foreign competition. American reliance on tariffs to protect domestic industries dates to the earliest years of the republic. The early tariffs were significant revenue producers, and until the Civil War period, the bulk of federal income was secured from customs duties. The contribution of tariffs to federal income has declined in importance in recent years, particularly since 1930.

Income Taxes. In recent years the attention of tax officials has been directed to business and personal incomes as a source of tax revenues. Both federal and state governments have relied

increasingly on income taxes to support the growing burden of public expenditures and to replace the declining yield of many other types of taxes. Beginning with relatively low rates, recent statutes have lifted income-tax rates to moderately high levels, at the same time decreasing or removing many exemptions and admitting lower incomes to the income-tax schedule.

From an insignificant contribution to federal revenues income taxes increased their contribution in the 1920's, reaching a peak of more than half of all federal revenues. Collections slumped sharply in the depression years, the proportion contributed to total revenues falling to less than one-fourth. This experience underlines an important characteristic of income taxation, both personal and corporate. Tax revenues from this source can be increased rapidly during prosperous years. In depression years, they shrink rapidly, following the decline in personal incomes and business profits. Even unusually high rates cannot maintain revenues during depression periods. In this respect income taxation may be contrasted with commodity taxation which produces a much more stable flow of revenue through all phases of the business cycle.

The collection of income-tax revenues has been seriously handicapped by widespread tax avoidance. Loopholes in the tax regulations have been exploited by lawyers and accountants, and illegal evasion has added to the loss in revenues. Action has been initiated in recent years to remove opportunities for legal evasion of the tax, and to minimize illegal evasion by a stricter administration of existing statutes. The extent of this problem is suggested by the fact that more than four million individual income-tax returns have been filed annually in recent years. Broadening of the tax basis in 1941 increased the number of returns well beyond these figures.

Many students of tax systems have urged the extension of the income tax to include within the tax system the bulk of the population in the low-income class. They have pointed out that individual income taxes are paid by a small proportion of the population. Even in prosperous periods, few have a net taxable income above legal exemptions. Participation in the tax, even on a basis of minute tax contributions, has been urged as a useful device for quickening public interest in public financial administration. The wealthy have added their support to these suggestions, although for other reasons. They have argued that the progressive

income-tax rates (large incomes are taxed at much higher rates than small incomes) penalize economic progress and block the natural operation of the profit system. This line of argument loses some of its weight when we recall that many commodity taxes are regressive in character and bear most heavily on those least able to pay.

Other Taxes. Among the variety of other taxes utilized by governmental divisions may be listed poll taxes, licenses, fees, and fines. The poll tax, or "head tax" as it has been called, is imposed on persons, rather than on property or income. It is levied on rich and poor alike in this country. Popular opposition to such an inequitable distribution of the tax burden is contributing to avoidance of payment and a general decay of the tax itself in many localities. The nature of the other varieties of taxes is suggested by their titles. The interested reader can examine them in detail in any general study of American taxation.

PROBLEMS OF TAX ADMINISTRATION

Certain special problems of tax administration will be considered in the following paragraphs. Of particular concern are the impact of tax measures on the business system, and the effect of taxation on general economic activity.

Revenue versus Regulatory Taxation. The first of these problems is suggested by the question: Shall taxes be imposed primarily to raise public revenues, or shall they be also utilized (in some cases primarily utilized) to regulate business? The revenue aspect of taxation has always been the first consideration, but increasing attention is now being attracted to regulatory possibilities.

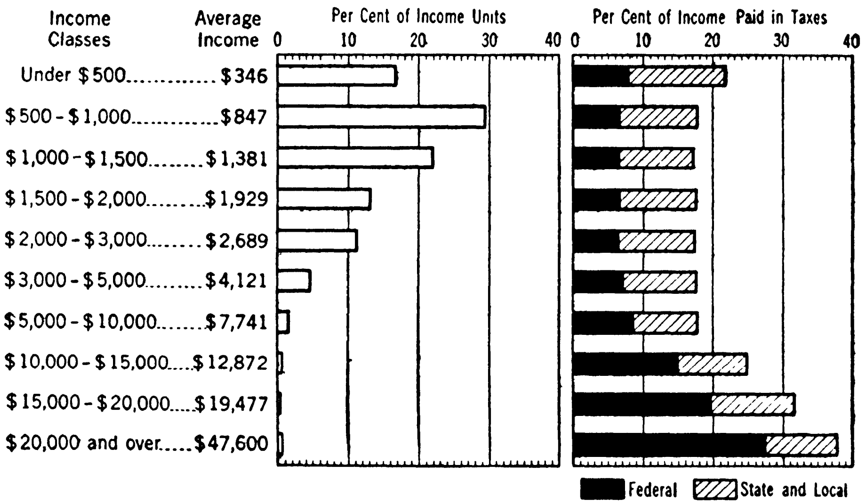
Among the uses of taxation for regulatory purposes may be cited the following: (1) the protective tariff, designed to protect American industry against foreign competition in domestic markets; (2) progressive income and inheritance-tax schedules, designed to lessen inequalities of income distribution and break up large family fortunes; (3) sales and license taxes, designed to regulate entrance into business, methods of carrying on business, and even consumption itself (wartime taxes on luxuries and taxes on alcoholic beverages serve as illustrations).

There is little doubt that the use of taxation for regulatory purposes may develop into an extremely effective device for adminis-

trative control. Critics of the tax structure warn against its unrestricted use, however. They suggest that unfair and discriminatory regulation may be sponsored under the disguise of revenue-producing measures, and the sound administration of the tax system perverted without the knowledge of the mass of the taxpayers and the even larger number of voting citizens.

CHART 33

EFFECT OF THE AMERICAN TAX SYSTEM ON VARIOUS INCOME CLASSES
1939



SOURCE: Temporary National Economic Committee, *Taxation, Recovery and Defense*, Monograph 20, U. S. Government Printing Office, Washington, 1940, p. 174.

Taxation and the Business Cycle. Another problem is suggested by consideration of possible relationships between the tax system and the business cycle. We know that tax revenues fluctuate with general business activity. Receipts from income taxes increase in prosperous years and decrease in depression years. Revenues from many other types of taxes vary with general business conditions, although not to the extent observed in the case of income taxes. But do taxes themselves contribute to cyclical fluctuations?

The causes of business cycles are legion. We do not know enough about the underlying factors to predict with confidence. But some connection there must be, for every tax affects such fundamental cycle factors as the distribution of wealth and income, con-

sumption, savings, and profits. Indirectly, even the rate of production is affected, largely through the impact of tax schedules on consumer spending and business profits.

MEETING THE BURDEN OF PUBLIC SPENDING THROUGH BORROWING

When revenues from taxation do not equal public expenditures, governmental divisions must make up the deficit by borrowing. For centuries public borrowing has been on the increase. In the past decades the rate of increase, particularly of federal borrowing, has been stepped up. What factors have contributed to this development?

Fundamental Factors in Public Borrowing. Of primary importance has been war. Modern warfare is so costly that it has proved almost impossible to finance through tax revenues alone. Taxes on income cannot be increased rapidly enough to meet the sudden burden of military expenditures.

Second in importance have been public works. Particularly in depression periods modern governments have turned to public works programs — the construction of roads, bridges, dams, and public buildings — to absorb the unemployed and restart the motionless wheels of private industry.

Other important causes of the growth of public debt include the following: (1) the ease of raising money through taxation as contrasted with the voters' resistance to increased taxation; (2) the growth of institutions collecting private savings and the corresponding increase in the total pool of savings seeking investment opportunities; (3) the impact of depression on modern society, with the consequent break-down of private charity and the increased burden borne by government; (4) assumption by modern government of a number of functions formerly assumed by private agencies.

With the exception of the sudden strain of war financing and the short-term impact of depressions on the public works program, resort to borrowing is largely traceable to an unwillingness to impose taxes sufficient to meet the burden of expenditures. Extravagance and waste are charged to future generations by the flotation of long-term bonds. If the present generation of voters had to meet these costs by increasing tax revenues, they would probably exhibit a greater interest in the economical administration of public business.

Varieties of Public Debt Investments. Borrowing by governmental divisions may be on a short-term or long-term basis. Short-term loans are often referred to as "floating" debt, while long-term loans are described as "funded" debt. These classifications correspond roughly to current liabilities and fixed debt in private business. Short-term loans are commonly undertaken to secure funds in advance of anticipated income from taxes. Long-term loans ordinarily arise in connection with wars or public works programs.

The principal instruments of short-term credit are bank loans, in local government financing, tax certificates, and Treasury bills. Maturities of these instruments ordinarily do not extend beyond 12 months. Intermediate term loans extend for periods of from one to five years. Long-term loans extending for more than five years utilize bonds as the principal instrument.

Federal Borrowing. Until 1931, federal borrowing on a long-term basis was primarily war financing. Short-term borrowing was resorted to for the purpose of anticipating tax collections. Since 1931, the Federal government has undertaken a broad spending program, financed by long-term borrowing, designed to relieve economic distress and aid economic recovery. Since 1940, the volume of federal borrowing has been increased at an unprecedented rate as a result of the national defense effort, the program calling for a two-ocean Navy, a draft Army, and the multiplication of the instruments of mechanized warfare.

The volume of federal borrowing is suggested by the following figures. In 1916, the federal debt was slightly in excess of 1 billion dollars. Between 1916 and 1919, it increased by over 25 billion dollars. During the following years the debt was reduced by almost 1 billion dollars annually, reaching a low point of some 16 billion dollars in 1930. This reduction was accomplished by applying surplus tax revenues, above current expenditures, to the purchase and retirement of outstanding bonds. In the depression years between 1931 and 1935, the debt increased by more than 10 billion dollars. By 1940 the federal debt had risen to over 40 billion dollars.

State and Local Borrowing. State and local governmental debt has grown during the past decades largely as a result of the expansion of public functions. The construction of highways, school buildings, and other projects has often led to excessive

borrowing. This has been encouraged by the readiness of investors to purchase securities. Again the voters' indifference to expenditures financed by borrowing and opposition to expenditures financed by taxation has encouraged uneconomic management of local finances.

The seriousness of this problem was not fully grasped until the depression years of the 1930's. Thousands of local governmental divisions were in default on payments of outstanding bonds. In almost every instance, failure to maintain payments could be traced to excessive borrowing and reckless forecasts of future requirements and income.

CONCLUSION

This brief survey of public finance suggests the significance to the business world of governmental spending, taxing, and borrowing. Every action in the area of public finance affects the level of business activity, profits, savings, consumer spending, and the distribution of wealth.

DEFINITIONS

Direct tax. Tax paid by the one from whom it is collected and not shifted to others.
Indirect tax. Tax paid by one and shifted to others.
Progressive tax. Tax weighing less heavily on small than on large incomes.
Proportional tax. Tax taking an equal proportion of all incomes.
Regressive tax. Tax weighing more heavily on small than on large incomes.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What does the term "public finance" mean?
2. Distinguish private finance from public finance.
3. Name an area in which private business competes with public business.
4. How is public business itself divided?
5. How have living standards changed?
6. Why have federal expenditures shown a tendency to increase relative to total expenditures?
7. List some functions of the Federal government which require a sizeable annual expenditure.
8. Why have state expenditures for education increased so rapidly?
9. Who are the major beneficiaries of spending by local governmental divisions?
10. By what process does taxation tend to redistribute incomes?
11. Give the two principal sources of funds for governmental expenditures.
12. Distinguish between progressive, proportional, and regressive taxes. Give an example of each.

13. Define and illustrate the concepts of direct and indirect tax.
14. Why is a broad diversity of revenue sources suggested as a sound principle of taxation?
15. How does simplicity in the tax structure benefit the government?

B

1. Do you favor the extension of governmental finance into the field of public utilities (as in TVA), even if it throws the government into competition with private business men?
2. Can you suggest a test to determine whether or not a particular function belongs in the area of private or public finance?
3. What are the advantages and disadvantages of state-financed schools as opposed to privately financed schools? Does each have a place? Or should education be an area reserved solely for publicly financed schools, with a consequent abolition of private schools?
4. Discuss the desirability of establishing federal public schools as well as, or in lieu of, state and local public schools. Can you think of any cases in which the Federal government has established schools?
5. How does this general discussion of the field of public finance, governmental functions, taxation, and regulation tie in with previous discussions concerning the responsibilities of business men?
6. Is the tariff primarily a revenue-raising or regulatory tax device? Explain. Is this kind of subsidy of particular domestic industries justifiable from the standpoint of the public welfare?
7. Is it sound fiscal policy to set up a tax structure designed to increase total revenue during prosperous years? Why? What effect will such a tax structure have on the general price level?
8. What effect does extensive short-term and long-term borrowing have on the general price level? Will it encourage or discourage inflation? Why?
9. Can you give any reasons for the growth in recent years of interest in fields which were once regarded as primarily the concern of local governments?
10. Is it desirable for the government of a democratic nation to increase the number of services which it offers to its people. Or is this invasion into spheres of activity solely regarded heretofore as "private" apt to lead to paternalism at the expense of individualism? When is the extension of governmental services desirable? When is it undesirable?
11. What are the disadvantages, if any, of a tax structure which has a broad diversity of revenue sources? What are the advantages? Is there anything favorable to be said for a single-tax system? What?

SUGGESTED READING

Buehler, A. G., *Public Finance*, McGraw-Hill Book Company, Inc., New York, 1936.

Green, W. R., *Theory and Practice of Modern Taxation*, Commerce Clearing House, Chicago, 1938.

PART SIX

COMPETITION AND RISK

With the completion of the description of business at work, we are now ready to examine the impact of competition on business management. Business activity in the private-enterprise system depends on business men's willingness to assume risks. Most of the significant risks in business are related to competition between business enterprises. Risk and competition are mutually related and must be examined together.

In this section we begin with the consideration of the place of competition in the private-enterprise system and the management problems which arise from competitive forces in the American economy. The second chapter is devoted to a study of the focal point of all competition, prices and price movements. The third chapter takes up the subject of risk and considers the several possibilities of shifting, avoiding, and absorbing business risks.

CHAPTER 25

MONOPOLY AND COMPETITION

The belief is commonly held that competition is the greatest controlling force in American business. Without competition between business enterprises, the drive for profits would lead to a ruthless sabotage of consumer interests. Without competition, the incentive would be lacking to search out new and more efficient methods of producing and marketing, to reduce costs, to improve products, to move toward more complete satisfaction of consumer wants. Whether or not they understand the full significance of these beliefs, most Americans think they are true.

The business man's view of competition does not always follow the line of these beliefs. In our study of the functioning of the American economy, it is now time to raise certain questions about competition from the business man's point of view and to suggest certain possible answers based upon the history of business experience. What, for example, does competition really mean? Is competition as prevalent in business as most people commonly think? To what extent and in what ways does competition control business? Wherein does competition fail as a control? To what extent does competition contribute to uncertainty and add to risk? What restrictions have been placed around the free play of competitive forces? What have been the effects of these restrictions? Study of such questions as these is directed toward some of the most significant problems confronting American business today, problems important to business and nonbusiness interests alike, to all citizens, to all students of the economic and social aspects of the American way of life.

BASIC CONCEPTS OF MONOPOLY AND COMPETITION

Let us begin with fundamentals. The two extreme states of economic activity are described as "pure competition" and "pure monopoly." What do these words mean? Do they describe business behavior? How do they help us to understand the operation of the American business system?

Pure Monopoly. The term "pure monopoly" may be used to describe the position of a business enterprise which is the sole producer and seller of a product for which there are no immediate and few remote substitutes. Examples of this type of economic position are rare in most areas of business. The American Telephone and Telegraph Company may be cited, as may thousands of local public utilities, but these are all the creations of the special character of their industry.

This does not mean that there are no monopolistic areas in business. The history of the great trusts, dating from the 1880's, suggests the powerful forces behind the drive to move from the intense competition which characterized business operations prior to that time toward a less competitive, more monopolistic state. What resulted, however, might better be described as a partial disappearance of competition rather than as a creation of pure monopoly. And despite legislative efforts to break up the trusts and force business men to compete, elements of monopoly are woven thoroughly into the pattern of contemporary business. We recognize their presence in a disinclination to compete fiercely, in the characterization of price-cutting as "cutthroat" or "chiseling," in the desire to freeze production and marketing methods, in the practice (how widespread few people know) of "putting inventions to sleep," in restriction of output and sharing of markets, and, indeed, in every action which betrays economic behavior contrary to that dictated by the forces of pure competition described below.

Pure Competition. As the opposite of monopoly, competition requires the presence of many sellers. While the products of all sellers need not be identical, they should be interchangeable enough for buyers to shift their purchasing from one to another, as they are attracted by price, quality, or other differentials. The competitive force in action drives sellers to search for the secret of cost reduction or quality improvement which will attract buyers.

To what extent are these conditions present in business? Clearly, they are more evident in the marketing of agricultural products than of manufactured goods. Manufacturers of branded, advertised merchandise have directed their efforts toward individualizing their products so that purchasers do not buy on a price basis alone. Moreover the trend toward concentration in many industries, the reduction in the number of competing enterprises, and attempts to eliminate what have been termed the "destructive" aspects of

price competition, have all contributed to a lessening of the competitive drive in many areas of American business.

Monopolistic Competition. The chief characteristic of the monopolist in action is that he calculates the probable sales volume of his product at different prices and attempts to set the price at that level which will bring in the largest possible profit, taking into consideration costs of production at varying levels of output. Following this appraisal of costs, prices, sales, and income, he usually proceeds to operate his plants below capacity. A price set by a monopolist ordinarily is a higher price than would be set if the industry were fiercely competitive.

The chief characteristic of a member of a competitive industry is that his price policy reflects his understanding that to make any appreciable quantity of sales he must sell at prices comparable to those of his competitors. If he sets his price below the competitive level, he will sell all he has and will attract so much business from other firms in the industry that they will be forced to lower their prices to his level.

Our knowledge of price behavior in American business suggests that the true state of affairs is one which might be called neither purely monopolistic (with a few obvious exceptions) nor purely competitive (again, with a few obvious exceptions), but rather by a term which describes an in-between state having certain characteristics of both and the exclusive features of neither. Two terms have been used by economists: "imperfect competition" and "monopolistic competition." Let us see how they apply.

Under conditions of pure monopoly there is one seller of a unique product for which there are no satisfactory substitutes. Under conditions of pure competition there are many sellers of readily interchangeable products. As the business structure has developed, most industries reveal an organization and product pattern between these two extremes. There are few sellers of similar but not identical products.

Competition this surely is, but not perfect competition. The products are similar, but not identical. Consumers distinguish, or think they distinguish, significant differences. When prices are approximately equal, consumers have firm preferences. But the products are interchangeable without great sacrifice of consumer satisfaction. When prices are not approximately equal, consumers begin to substitute one brand for another. Throughout

the range of American manufactured, branded, and advertised merchandise, these illustrations find parallels. This is neither true monopoly nor true competition, but something between the two, resembling both and duplicating neither.

For more than 50 years the decline in the number of sellers has been continuing. Industrial combination has brought former competitors under unified management. Past competition has driven the weaker concerns from the field. In the manufacture of automobiles, tobacco products, automobile tires, steel, and many other commodities, the typical industrial structure is dominated by a small number of large concerns. There is still competition, but of the in-between variety described in the preceding paragraphs. The sellers behave like limited monopolists. They calculate the effects of price changes upon consumer demand for their products, upon the switch to substitutes, upon income and profits. They appraise the probable reaction of other concerns in the industry, and consequent repercussions in their price policies.

When these considerations become dominant in the minds of the framers of administrative policies, many of the characteristics of pure competition disappear. When 80 per cent of the output of an industry is controlled by a few giant enterprises, the fierce aspects of price competition are often abandoned. Small competitors know they exist by the permission of the giants. They refrain from price adjustments which might anger the industry's masters. Each of the dominant concerns realizes that any price cut must be followed by competitive price reductions and consequent benefits to no one. No one upsets the applecart. Cutthroat competition ceases to exist.

It is this stage of modified competition which now controls business practice in many industries. There are still areas of business activity where fierce competition can be found. But, with few exceptions, these are not the major industries. Since an understanding of the operation of the American business system depends upon a realistic comprehension of how this modified competition really functions, we shall direct our inquiry into the sources of monopolistic competition and the results of its development.

CAUSES OF THE BREAKDOWN OF PURE COMPETITION

We now recognize that what the average citizen means when he speaks of the "competitive system of American business" is something very much like what has been described above as pure competition. Similarly, what the average citizen means by the term "monopolistic practices" is something like the economists' conception of pure monopoly. But "competition" to the modern business man means a state of limited struggle for customers. Early business was truly competitive. What forces, we may ask, induced the breakdown of pure competition? When and why were monopolistic elements introduced into the business structure? What caused, (1), the limitation of the number of competing firms in many industries, and (2) the drive toward product differentiation and the effort to create consumer loyalties to specific brands?

The Industrial Revolution Again. A primary cause of industrial concentration was certainly the Industrial Revolution. Again we are reminded of the far-reaching economic and social effects of that period of change in production methods. Full realization of the economies of mass production required production on a large scale. Profitable utilization of productive facilities necessitated high-level sales volume. The decades following the first impact of the Industrial Revolution on American manufacturing witnessed bitter struggles for market domination, a drive for increased sales volume in every industry in which the power-driven machine had been introduced. Every increase in sales meant not only more business, but also the justification of the introduction of more and larger power-driven machines.

In some industries the desire for added volume resulted in the combination under single management of existing smaller enterprises. In others, the large units maintained savage competitive policies, price cutting, product improvement, attacks on distributive outlets, and all the other weapons of business warfare designed to force weaker concerns into bankruptcy. The improvement of machinery gave every advantage to large-scale enterprise. Only those enterprises with large volume could utilize the newest mechanical production methods. So efficient were the new machines that costs were reduced below levels in smaller plants. The smaller units in many industries were undersold because develop-

ments in production methods gave every advantage to the larger units. By the fourth quarter of the nineteenth century in industry after industry the developing technology of the machine had reduced the number of competing units and increased the size of the survivors.

Patent Laws. A second cause of industrial concentration and of lessening competition was the established patent law.[1] The original justification for a law protecting patents rested on the theory that inventions and improvements would be stimulated if their originators were guaranteed protection and monopoly rights for a limited period. Commentators on the patent law have suggested, however, that the patent law in practice has had more far-reaching effects. In some cases, the owners of patents have expanded their protected operation so fast and on so large a scale that by the conclusion of the protected period they have outstripped all possible competition. In other cases, improvements on basic patents have been patented, in turn, by the original patent holders, with a consequent extension of the monopolistic privilege.

It was maintained in 1930 that the Radio Corporation of America held exclusive rights to sell and use devices protected by practically all the patents of any value in the industry. These rights were in turn leased to selected manufacturers who paid royalties of 7½ per cent of the value of all radio apparatus they sold. Through merger and purchase the United Shoe Machinery Company acquired control over most of the patents covering the manufacture of shoe machinery. It leased its patented machines to shoe manufacturers and required the lessees to use the patented machines only in combination with other machines sold by the United Shoe Machinery Corporation. In 1920 it was charged that in this way the company controlled 95 per cent of the American shoe-machinery business.

Another problem arose in connection with the practice of "putting patents to sleep." Throughout the nineteenth century patent protection depended on the utilization of the patented article or process. In 1908 the Supreme Court held that a patent might be suppressed. Since that time many large corporations have purchased patent rights to new machines and processes which threatened to render obsolete or worthless existing machinery and capital investment, and have thereupon suppressed the patents. As a

[1] The present patent statute grants protection for 17 years.

result of this practice a law designed to encourage invention and improvement has been utilized to delay the introduction of new methods to protect existing investment in obsolete methods.

Furthermore, the concentration of industrial research under the direction of large business enterprises makes it likely that a high proportion of future inventions and improvements will be developed within the control of existing business concerns. Improvements are more apt to be worked out within than outside large business enterprises. Even when they are developed by outsiders, the capital required to put them into active operation is often beyond the capacities of independent financing, and patent rights must be sold to those who have used patent rights in the past as devices for lessening competition.

Corporation Law. A third cause of industrial concentration and lessening competition was the developing structure of corporation law. We have already observed how the shareholding and limited-liability features of the corporate form of organization advanced the concentration of capital funds in single enterprises. Proprietorship and partnership organizations could not attract capital to finance industrial expansion. The larger and more successful corporations grew at the fastest rate, breeding success on success. Their earnings were available for reinvestment, while their profits made outsiders eager to subscribe to new security issues and participate in future profits.

"Destructive" Competition. A fourth cause of industrial concentration and lessening competition grew within the competitive system itself. By the closing decades of the nineteenth century industrial competition was no longer a struggle of thousands of pigmy enterprises within each industry. It was a battle of giants, a war-to-death between industrial titans combining vast investments and fought over the entire country. Investment bankers, newly secured in their strategic positions as the controllers of the flow of new money into industry, looked upon this struggle with horror. "Why," they asked in effect, "should this destructive competition be carried on at so great a cost to the competing enterprises and with such great risks for invested capital? It is no longer reasonable. Let us combine and by agreement cease to compete."

This was the era of the great "trusts." In all the major industries, and usually under the guidance of investment bankers, the

larger remaining enterprises were brought under single, unified financial control. Destructive competition was to be abolished. Shortsighted price cutting to eliminate competitors was terminated. By agreement, markets were to be shared on an arranged basis. Competition was to be stabilized, with easy terms and high profits for all.

So formidable a device for destroying all vestige of competition did these created monopolies appear to be, that there was an immediate effort to abolish them and force business men to compete. This effort took the shape of antitrust legislation, beginning with the Sherman Antitrust Act of 1890. Before we consider this attempt to force business men to compete, let us pause to review the history of product differentiation, the other phase of the general movement toward lessened competition.

Product Differentiation. A state of pure competition assumes a complete absence of customer loyalty to specific brands. Purchasing follows the best values in terms of price or quality comparisons; the products are identical, or nearly so; and sellers compete for the patronage of buyers who have no preconceived ideas, no loyalties, and no affiliations.

Such unrestrained consumer shifting from one manufacturer's product to another's obviously subjected business concerns to great risk. Investment in plant, equipment, raw materials, and labor might be rendered worthless by a sudden and unexpected shift in customers' preferences. It was only natural that a business manager should try to combat that tendency and reduce the risks by convincing buyers that his product was different from other competing products, that it was better, that they should buy it at all times regardless of other products, their prices, and their qualities. To the accomplishment of this purpose were devoted all the devices of sales promotion, advertising, and display. The following illustrations will serve to suggest the result.

The three leading brands of cigarettes are Camels, Lucky Strikes, and Chesterfields. They are sold at similar prices in most stores. A rise of 1 cent a package in the price of any one of these brands would be followed by a sharp decrease in its sales. A fall in the price of 1 cent a package, prices of the other two brands remaining unchanged, would be followed by an equally rapid increase in sales. Yet so long as all these brands are sold at the same price, customers have strongly established preferences. No one walks

up to a tobacco counter and asks for "a package of cigarettes, please." All purchasers state the brand they want.

The three popular makes of low-priced automobiles sell at approximately the same price. Each has its adherents. But a change of only $50 in the price of one of the automobiles, prices of the other two remaining unchanged, would have a similar repercussion on its sales.

The strength of this customer brand loyalty varies product by product, of course. To the extent that it exists, it changes the nature of competition and introduces certain elements of monopoly. This is a monopoly with a very limited pricing freedom which extends, at its upper limit, to the point where loyal customers refuse to pay a price differential and begin to shift to substitute brands.

THE EFFORT TO MAINTAIN COMPETITION

Forces opposed to the growth of monopolistic elements in American business made their appearance by the close of the Civil War period. A number of states passed antitrust laws in the 1880's. Business action was already operating on a national scale, however, and no state could hope for effective control. Support shifted to a demand for federal legislation to break up the newly organized trusts and force business men to compete. One result of this pressure was the passage of the Sherman Antitrust Act in 1890.

Purpose of the Sherman Act. The Sherman Act was a relatively simple law. Section 1 declared to be illegal "every contract, combination in the form of trust or otherwise, or conspiracy in restraint of trade." Section 2 provided that every person should be held guilty of a misdemeanor "who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of interstate or foreign trade." Criminal prosecution was authorized, and any injured party might bring suit and claim triple damages.

Results of the Sherman Act. Examination of the record reveals that the Sherman Act did not halt the trend toward industrial concentration. A few trusts were ordered disbanded. In general, however, the law was not rigorously enforced. In those instances in which attempts were made, judicial interpretation was extremely narrow. In any event, we may observe that the trustification of business — the attempt to organize real and effective monopolies — was not the significant development. This was

still the lessening of competition arising out of the reduction in the number of concerns operating in each industry. The issue was not the rise of monopoly, but rather the decline of competition. In most industries some competition remained, but of a new sort. The Sherman Act was not directed at the control of monopolistic competition and had no effect upon it.

Other Antitrust Legislation. Other antitrust legislation followed. The Sherman Act was supplemented in 1914 by the Clayton Act and the Federal Trade Commission Act.

Of the four major provisions of the Clayton Act, two sought to prohibit specific monopolistic trade practices, and the others outlawed certain business arrangements which might serve as steps towards monopolistic control. The two prohibited practices were price discrimination by a seller between two buyers and the sale or lease of goods on condition that the purchasers should not handle the products of competitors. The two outlawed arrangements were devices giving one company control over the activities of another.

The other legislation created the body known as the Federal Trade Commission and directed it to prevent "unfair methods of competition in commerce." Only partially was the Federal Trade Commission Act concerned with antitrust proceedings. For the most part the attention of the Commission has been occupied with cases of deception, unfair statements, and similar unsavory competitive practices. Its role has been compared with that of the prize-fight referee whose task is to see that the boxers fight fairly and in accordance with the rules.

The Federal Trade Commission Act was broadly designed to supplement the antitrust laws and, particularly, to preserve competition in American business. It looked also to the establishment of a level of competition, to the observance of certain basic ethical standards in the competitive struggle. Among those competitive methods and practices which the Commission has regarded as "unfair" are misbranding of products, misrepresentation of the value of a product, and the simulation of trade-marks and names.

The Commission has used two standards in appraising these various types of competitive practices. It has considered, first, the effect of alleged unfair practices on competitors, and has condemned those acts which have, through deception or direct attack, unfairly injured competitors of the offending firm. It has also

considered the public interest in fair competition. A tendency to confuse purchasers at any stage in the marketing process has been held sufficient grounds for condemning certain competitive practices.

The Federal Trade Commission Act was amended in 1938 by the Wheeler-Lea Act which granted to the Commission a new power. It empowered the Commission to prevent the use of false advertisements of foods, drugs, and cosmetics.

There is neither time nor space to enter into a discussion of antitrust proceedings under the Sherman and the Clayton Acts. Some monopolies were prosecuted and forced to disband. In general, no United States attorney general made a wholehearted and realistic effort to enforce the laws until the appointment in 1938 of Thurman Arnold as assistant attorney general in charge of antitrust prosecutions. With the aid of a considerably augmented staff Mr. Arnold undertook a vigorous campaign to apply the Act to restraints of trade wherever he could find them. In the intervening period, trust prosecution was desultory and, except for action by the Federal Trade Commission, the trend toward limited competition continued.

THE METHODS OF MONOPOLISTIC COMPETITION

What have been the real characteristics of competition in the decades since the passage of the Sherman Act? What methods have been employed to limit and control competition? How effective have they been, and how widespread?

Trade Associations. Among the devices for controlling competition in its fiercer aspects, the trade association holds a primary position. This term is applied to the organization of producers in a single industry. Trade-association activities ordinarily begin with the collection and dissemination of information on operations within the industry. In many instances, however, they have extended their activities to include public relations work, lobbying, and control of methods of producing and selling.

The classic comment on trade-association activities was made by Adam Smith (*Wealth of Nations*, 1776): "People of the same trade seldom meet together even for merriment and diversion but the conversation ends in a conspiracy against the public or in some contrivance to raise prices." This charge cannot fairly be at-

tached to every trade association. Their influence and the character of their activities in a number of industries, however, suggest their availability as potential choices for the control of competition.

Direct and outright control of prices and output was declared illegal by the antitrust laws. In indirect ways, many trade associations have been successful, if not in controlling, at least in guiding and influencing price and production competition. Much of this indirect influence has been founded on the collection and dissemination of information. The effective presentation of vital industrial statistics readily induces the adoption of policies by individual concerns which are conservative in their competitive outlook.

The principal topics of trade-association statistical research have been production and marketing costs, price movements, rate of production, accumulation of inventories, rate of sales, and rate of deliveries to customers. It must be recognized that much valuable work has been accomplished by such statistical services. They have made a genuine contribution to the elevation of levels of efficiency. They have guided management policy along sounder lines by providing a fund of vital information relating to every significant aspect of business operation. But they have also tended to discourage price-cutting and aggressive plant expansion. The extensive use of certain statistical series has led directly to informal price stabilization.

Probably the most effective device for this purpose has been the use of "open-price" reporting systems by some trade associations. Here all members file copies of their price schedules with the association. There are no secret prices. Any member of the industry can know the range of prices at which his competitors sell their products. Proposed price changes are filed with the association prior to their adoption. The waiting period provides an opportunity for competitors to meet the proposed price schedules. The procedure often leads to stabilization of price competition.

Trade associations have not been uniformly successful. They have been hampered, in some cases, by the refusal of certain members to adhere to cooperative industrial programs. Nor have all the associations pressed for control of competition. But the tactics described above have been sufficiently popular to justify the inclusion of the trade association among the significant devices for controlling competition.

The associations found that fuller information concerning methods of cost accounting, actual costs, prices, production, shipments, and the like did not meet their needs. They were impelled to devise methods of replacing individual decisions concerning price and production policy (no matter how broad their factual basis) by cooperative control. The provision of information bred a desire to secure unanimity in the interpretation of that information. Information concerning the best bookkeeping forms for calculating costs passed over into suggestions concerning policy in the matter of distributing costs over production at different times and over different types of products. Suggestions concerning amounts to be added for contingencies and profits developed this policy into one of suggested prices. The use of average instead of individual costs suggested a uniform price for the whole industry. Statistics of production were accompanied by suggestions concerning future production policy; output was compared with current sales and it was suggested that production, and not prices, called for adjustment when production exceeded sales. Statistics of production were used as a tentative basis for the sharing of the market. Statistics of inventories and unfilled orders supplemented these efforts. Direct statistics of prices developed the desire to induce uniformity of prices and thus restrict price competition; price cutters were sought out and cajoled or threatened.[1]

Price Leadership. Closely resembling the trade association, although functioning on a wholly informal basis, is the practice known as "price leadership." The term refers to the method of determining prices in an industry when most of the firms accept the price schedules adopted by one of the firms. Under conditions of pure competition, any concern in the industry may initiate price changes. When price leadership exists, one firm initiates almost all changes.

Ordinarily the price leader is the largest and strongest firm in the industry. Smaller enterprises hesitate to cut below the leader's established schedule of prices because of the justifiable fear that such a move would precipitate a price-cutting war in which the largest enterprise must emerge victorious. The relationship may be wholly informal. There may be no agreement between firms regarding safe price tactics. It is often simply good sense for a small concern to avoid disturbing an industry in which price competition is at peace. "Let sleeping dogs lie" becomes a motto of prudent administration.

Probably the best example of unorganized, informal price leadership may be found in the steel industry. Controlling over a period of years between 40 and 50 per cent of the total industrial

[1] A. R. Burns, *The Decline of Competition*. McGraw-Hill Book Company, Inc., New York, 1936, p. 74.

output, the United States Steel Corporation has served as price leader for more than 35 years. Its leadership has not been absolute; neither has it been continuous. There is little evidence of formal collaboration. Over this term of years, however, price schedules set by the Corporation have been regularly adopted by the industry as a whole, and, until very recently, there has been little effort to compete on a price basis with the largest firm in the industry.

Evidence of similar informal price leadership during at least part of the period since 1900 has been brought forward for the petroleum industry, the agricultural-implement industry, the anthracite-coal industry, the can industry, the corn-products industry, and, perhaps less consistently, for a number of other industries. In almost every instance, the practice occurred in industries dominated by a single giant concern, usually controlling more than 30 per cent of total industrial production. In few cases has the leadership been uniform and unchallenged. But steady adherence to the leader's price schedules, the absence of price cutting (note the special significance of this factor in depression periods when one would normally expect savage price cutting in the effort to garner a share of the dwindling business), and generally stable relations between firms all suggest the existence of an informal, often unarranged, price leadership procedure. Again, as in the case of many trade-association activities, the effect is to lessen competition and to substitute within each industry "a rule of reason" for the economic war of pure competition.

National Industrial Recovery Act. The special status of competition under the National Industrial Recovery Act of 1933 must be included in this review of the methods of monopolistic competition. Regardless of actual business practice during the preceding 40 years, the public attitude toward competition had been characterized by the firm belief that competition was the lifeblood of business and that wherever and whenever business men attempted to limit, control, or eliminate competition they should be compelled to compete. This was the official attitude of the Sherman Act, the Clayton Act, and the Federal Trade Commission Act. Devices, both formal and informal, had been utilized for the subvention of monopolistic competition. Frowned upon officially, they had been employed in many of the basic heavy industries. Thus, the background of the National Industrial Recovery Act revealed a sharp divergence between business practice and public policy.

The Act itself was announced as legislation to eliminate unfair competitive practices. This had been the announced purpose of the Federal Trade Commission Act of 1914. Other purposes were the maintenance of united action by labor and management under governmental supervision, and, in general, the restoration of prosperity after three years of the worst depression in American history. Under the terms of the Act business men organized in industry groups were encouraged to draw up codes of fair competition. The codes were to be submitted to the President for his approval. It was further provided that although codes should not be approved when they permitted monopolies, action by business men complying with an approved code "shall be exempt from the provisions of the antitrust laws of the United States."

This was, in effect, an invitation to business to regulate itself by industries.[1] It was founded on the widely held opinion that over-intense "destructive" competition had contributed to the depth and the prolongation of the great depression. Such terms as "chiseling" and "cutthroat" competition had been applied to competitive practices induced in many industries by depression conditions of falling sales and disappearing profits. The Act practically invited the application and extension of the vaguely expressed efforts of trade associations during the previous 20 years.

In many industries codes were approved which provided for control of output. This might be expressed as a device for balancing production in the industry against potential sales, so as to minimize overproduction and consequent price-cutting practices. Frequently this was supplemented by a program of allocating allowed production between firms in the industry, each concern being assigned a quota which might not be exceeded except with the approval of the code authority. More than 60 codes provided for maximum number of hours weekly during which plants might be operated.

In a number of codes control was extended to prices. Ordinarily this was to be accomplished through setting minimum prices below which no firm might sell its products or its services. More industries attempted to frame price-control provisions than secured approval. Where approval was given, the excuse was usually the

[1] As a balancing concession, the Act appealed to labor in the requirement that codes must contain provision for the right of labor to organize and bargain collectively through representatives of its own choosing.

familiar one of preventing cutthroat competition which threatened to disrupt the industry. Price control found a more popular setting, with official approval, in the hundreds of codes containing provisions prohibiting sales below cost.

Open-price practices, familiar in trade-association history, reappeared in many of the codes. Provisions for open prices ordinarily stipulated that firms must sell at their published prices, a schedule of which must be filed with the code authority. Many of the codes reinforced this provision with the further stipulation that no firm could change its price schedule until it had given notice to the code authority of the proposed changes and the new schedule, and had waited a prescribed period ranging from 1 to 20 days. Such a waiting period obviously opened the way for applying pressure to firms which proposed to change prices. This might be expected to discourage planned price reductions.

In a number of industries, control was extended to nonprice competition. Thus some codes regulated selling terms and discounts granted to purchasers for large quantity orders. Others regulated credit terms extended to buyers. Others regulated such competitive devices as trade-in allowances (particularly in the automobile industry), advertising allowances to customers in return for their sales-promotion efforts, guarantees against future price declines, and a series of other practices. In every case, the control was directed toward securing a uniformity of competitive practice such that no single concern might outbid another.

It is interesting to observe the appearance of an organized effort to freeze industrial structures. Many codes aimed at controlling and limiting the entry of new firms into industry. They prohibited the introduction of new machinery, the construction of new plant, and increasing productive capacity, except with the express approval of the code authority.

In summary, it is clear that the major purpose of the codes of fair competition was the control of competition along lines laid down less effectively by many pre-NIRA trade associations. The net result was the elimination of many of the devices of free competition and the introduction, with official approval, of monopolistic elements of control. Under the cloak of eliminating "unfair" methods of competition, all methods of competition were severely restricted, if not completely prohibited.

The National Industrial Recovery Act was declared unconstitu-

tional by the Supreme Court in 1935. Henceforward, although voluntary codes might be adhered to within industries (as in the earlier trade association control), immunity from the antitrust laws could no longer be offered. Competition speedily returned to its state prior to the Act.

Robinson-Patman Act. Yet another piece of federal legislation, the Robinson-Patman Act, 1936, influenced competitive methods. This Act amended the Clayton Act of 1914. It struck directly at the practice of certain manufacturers in granting unusually large quantity discounts to certain purchasers, notably the great retail chain-store organizations. The Act specifically prohibited the granting of quantity discounts in excess of the savings which could be demonstrated to be secured from quantity buying. It recognized that selling in carload lots was less expensive per unit handled than selling in smaller quantities. But it forbade excessive discounts, along with certain other types of discounts and rebates commonly available only to large retailers. Above all, it placed the burden of proof, the justification of the discount, on the manufacturer accused, rather than upon the Federal Trade Commission, the enforcing agency. To some extent, therefore, the Act lessened the economic advantages of large retail distributors and somewhat weakened their competitive position as against small independent merchants.

Retail Competition. Consideration of discount schedules leads directly to the vexing problem of competition at the retail level. For many years, even during the period which saw the growth of monopolistic elements in production, retail competition was maintained as fiercely as was production competition in the first three-quarters of the nineteenth century. As it had to production, giantism came to retailing, this time in the shape of great chain-store organizations: the Great Atlantic and Pacific Tea Company, the Kroger Grocery and Baking Company, Safeway Stores, Inc., and First National Stores, Inc., in the grocery field; F. W. Woolworth Co., S. S. Kresge Company and others in the limited-price variety-merchandise business; Sears Roebuck and Company and Montgomery Ward & Co., Inc., in the mail-order business; and the same two concerns, J. C. Penney & Company, and others in the general merchandise field. But the smaller independent merchants remained, and the competitive fight continued.

Strangely enough, it is among the smaller merchants — long

regarded as the heart of the American competitive system — that limitations on competition have recently appeared. Fearful of the possible results of chain-stores' and big department-stores' competitive methods in forcing small merchants out of business, associations of independent retailers and associations of wholesalers have combined to force the passage of price-fixing laws in the various states.

State legislation took several forms. First there were so-called state "fair-trade acts." This legislation provided that it should no longer be illegal for a manufacturer to contract with a retailer to fix the minimum price at which the retailer might sell the manufacturer's branded merchandise. The acts further stipulated that the terms of a contract between a manufacturer and one retailer should, after due notice, be binding upon all other retailers in the state. These laws, eventually enacted in all but a handful of states, had one purpose: they represented the attempt of small independent merchants to prevent price cutting by large retailers. They were supported in their application by the federal Miller-Tydings Act which declared legal similar manufacturer-retailer contracts across state lines.

In a number of states, fair-trade laws were followed by so-called "unfair-practice" laws. The latter legislation prohibited the sale of merchandise in any retail store at less than the cost of the merchandise to the retailer plus a minimum specified markup. These laws had the effect of placing a floor under all retail prices. Whereas the writing of price-fixing contracts under the fair-trade laws was voluntary — a manufacturer might contract, he was not compelled to — under the unfair-practice acts, selling below the legally established price floor was forbidden.

The result of this type of price-fixing legislation, clearly, was to minimize the usefulness of that most effective of competitive weapons, price cutting. Under the fair-trade acts, price-fixed merchandise was sold at identical prices in all outlets. Efficiently operated retail stores could not pass on to their customers the benefits of their efficiency in the form of lower prices. Nor could nonservice stores reduce prices in line with their lower operating costs. Up to the present, only limited varieties of merchandise have been price-fixed (chiefly drug products, cosmetics, books, and liquor). Under the unfair-practice legislation, price floors limit price cutting in those states in which they have been established.

THE STATE OF COMPETITION

After this review of the methods of monopolistic competition, what can be said of the state of competition in the American economy today? Does the existence of monopolistic elements in the competitive structure destroy all hope of preserving competition between business units? Can business men be forced to compete by legal or administrative action? Should they be forced to compete? What is the wise social policy?

No one can doubt that most areas of American business are still competitive. The competition is less severe than it might be in certain fields. In some it operates under restrictions. It is clearly limited in those industries which are dominated by a small number of large units. But there are few clear-cut monopolies except in those public-utility industries where operating conditions suggest that competition would be more expensive and less efficient than operation by a single enterprise.

The attempt to force business men to compete — as evidenced by the antitrust laws — has not been successful. Some blame the failure on the unwillingness of the Department of Justice to press for enforcement of legislation on the statute books. Others protest that no legislation could be effective, inasmuch as the essential problem is less one of the establishment of monopolies than of the lessening or modification of competition.

Free of all control, there appears to be an inevitable drift in almost every industry toward a breakdown of extreme competition. For competition increases the risks of business management, and the conserving tendency is always in the direction of minimizing risks. Some of the price aspects of the competitive struggle, as well as their repercussions in business-cycle behavior, will be discussed in the following chapter.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What are the traditional arguments for competition as the regulator of business activity?
2. Define and illustrate "pure" monopoly.
3. What is the chief characteristic of the monopolist in action?
4. What do the terms "imperfect competition" and "monopolistic competition" mean?

5. Why has the number of sellers declined in the past 50 years?
6. What does competition mean to the modern business man? What does it mean to the average citizen?
7. How did the Industrial Revolution contribute to the limitation of the number of competing firms in industries?
8. How do patents stimulate the drive toward product differentiation and the effort to create consumer loyalties to specific brands?
9. What does the term "putting patents to sleep" mean? Why do producers pursue such a policy?
10. What part did the development of the corporate structure have in causing industrial concentration and lessening competition?
11. On what basis did the trusts propose to compete?
12. How do business men attempt to establish fixed consumer preferences for their products?
13. What does the Sherman Act provide? Why was it passed?
14. Name the two specific monopolistic trade practices which the Clayton Act outlawed.
15. List some competitive methods which the Federal Trade Commission has regarded as unfair.
16. Explain the effect of the Wheeler-Lea Act of 1938.
17. How do trade associations indirectly guide and influence price and production competition?
18. How does the "open-price" reporting system work?
19. Give an example of price leadership.
20. What is a code of fair competition? How and under what piece of legislation was it set up?
21. Did control extend to nonprice competition or price competition, or both? How?
22. Summarize the provisions of the Robinson-Patman Act.
23. What are fair-trade acts? What addition did the Miller-Tydings Act make to the field of fair-trade legislation?
24. Why is there an inevitable drift in almost every industry toward a breakdown of extreme competition?

B

1. Is a labor union a monopoly, pure or imperfect? Was AAA regulation in any sense a governmental attempt to monopolize the field of farm production? How about the present crop-restriction program? Why do we publicly encourage these inroads on traditional notions of free competition?
2. Does the establishment of a trade name through advertising and other promotional schemes tend to eliminate price competition and effect at least a partial monopoly? Is this desirable? Why?
3. When is competition "fair" and when is it "unfair"? Do these concepts make any sense? Are they at all helpful in attempting to map out a legislative program rooted in sound public policy? What does a business man really mean when he says that certain policies by competitors must be ended because they are unfair?

4. Are there any fields which are peculiarly susceptible to the establishment of monopolies? What are they? What kind of demand curve usually exists in these fields?
5. Do you think that competitive conditions prevail in the automobile industry? In the cigarette industry? Why?
6. Does the development of huge productive units increase or decrease the responsibilities of the managers of these units? Explain. Are combinations and mergers, designed to facilitate control of the commodity market, promoted primarily for public or private interests? What does this fact suggest about the problem of price control?
7. If competition is to be regulated, is it more desirable for the government to regulate it through legislation than for the business men to regulate it themselves through trade associations, price leadership, codes of fair competition, etc.? Why?
8. What does your answer to question 7 suggest about the use of the legislative controls of competition set up in the NIRA?
9. Is competition by producers in the field of advertising in an effort to build up a trade name value in their particular product or products desirable? In the long run do the producers benefit from such competition in the name field? Does the public benefit at all? Does anyone benefit? Explain your answers fully.
10. Upon what basic legal institution in the private-enterprise system does the right to a patent rest?
11. How does the discussion in this chapter tie up with the concept of financial capitalism which we discussed in an early chapter?
12. What should be the motives of state and federal legislatures in passing statutes designed to regulate and control competition? From your examination of the various price-fixing statutes described in this chapter, do you think that legislatures are primarily motivated by a concern for the general welfare when they pass such statutes? By what are they motivated?
13. Compare the functions of modern trade associations with the medieval craft guilds. Were they identical in any respects?
14. Do you think that the NIRA was in any sense a public sanction of monopoly conditions in certain areas of economic activity? Why?
15. In periods of great depression when the general price level is falling, salaries of unorganized workers are decreasing, and prices for products produced and marketed under competitive conditions are shrinking, what is the effect of prices being fixed or raised by the various price-control devices discussed in this chapter? Does the answer to this question suggest any justification for the federal crop-restriction program and the governmental encouragement of labor organization? Does it have any bearing on the current problem of whether or not all prices in a period of prosperity should have a ceiling?

C

1. In light of the defects of the Sherman and Clayton Acts, write a report suggesting some desirable types of legislation to eliminate or control monopolies.
2. Read and write a report on *Bottlenecks of Business* by Thurman Arnold.

3. Does your state impose any price-fixing restrictions upon its producers or its marketers? Through research discover what they are. Is there a trade association in your home town? How does it work? What are its objectives? Is it effective in realizing them?
4. List all the purchases which you have made in the last month. Which purchases were made primarily because they were lower in price than their competitors? Which were made primarily because of a special brand or trade? In the case of the latter how much of a price increase would you tolerate before switching to some other brand? Which of the commodities which you have purchased in the last month could be most freely exploited by monopolists? Why? (Or, to put it another way: which of the commodities has such a heavy demand for its particular trade name that a substantial increase in its price could be effected without materially affecting its volume of sales?)

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CHAPTER 26

PRICES, PRICE POLICIES, AND PRICE FLUCTUATIONS

Prices, price relationships, and price movements are the initiators of all economic activity. They affect costs, income, and profits. They are the universal measures of value. Every change in raw material expense, labor's wages, rents, and charges for services is reflected in prices. A major part of the competitive struggle in business is waged in terms of prices. Price levels determine business income. Price movements are major causes of the most serious business risks. Through their effect on short- and long-run profits, price movements play a significant part in business cycle developments.

The principal questions for students of business organization and administration appear to be the following. What kinds of price movements occur in the normal operation of the private enterprise system? Are most prices rigid or flexible? What is the effect of rigidity and flexibility of prices? How are price movements related to administrative policies in business? What is the relation of price changes to those fluctuations in business activity which are called business cycles?

VARIETIES OF PRICES

The first, and perhaps the most important, observation to make about prices is that they present the most complex assortment of phenomena to be observed anywhere in the world of business. There are all kinds of prices for all kinds of commodities. They are related in a variety of ways. Some prices directly affect or are affected by other prices. Some prices have an observable if indirect relationship with other prices. Some prices appear to be related to other prices at certain times, while at other times no relationship whatever can be observed. Some prices are controlled by business men. Other prices appear to be unrestrained by any control except the broad forces of supply and demand. And there is still a third group of prices which seem to be under a kind of partial control, now operative, now relaxed. Some prices

are maintained without variation for months or even years. Other prices fluctuate wildly, with no observable regularity. Still other prices appear to move through repeated cycles which can be noted, measured, and even predicted. And yet complex as is the world of prices at first examination, the business man must understand something of its composition, its web of inter-relationships, and its fluctuations. For prices are the determinants of business policies, of profits and of losses, of risks and of security.

As a primary aid in the search for an understanding of prices, we may attempt to describe a selected group of price classifications. Space limitations and the inherent difficulty of the subject prevent the presentation of either a complete or a thorough list. Even on an elementary and simple level, however, the description should be useful. Let us consider briefly the following groups of prices: prices of farm products, prices of natural products, prices of manufactured goods, and retail prices.

Prices of Farm Products. Prices of farm products are generally subject to frequent, wide, and uncontrolled fluctuations. It has been commonly observed that prices of farm products fluctuate more often and with greater amplitude than do prices of all other types of commodities in the several classifications listed in the preceding paragraph. The contrast is sharply pointed by the following statistics on price movements during the depression period between 1929 and 1933 and the ensuing period of business recovery through 1937.[1] Between 1929 and 1933, prices of farm products declined by more than 60 per cent. In the same period, prices of raw materials declined by 50 per cent, while the decline in the prices of semi-manufactured goods averaged 40 per cent, and the decline in the prices of finished products was only 30 per cent. Building materials recorded a price decline of less than 27 per cent, and the decline in prices of chemicals, house furnishings, and metals and metal products was only 23 per cent. During the next four years of mounting business activity, the trends were reversed. Prices of farm products rose farthest and fastest, while the prices of those commodities which in the previous period had revealed the smallest rate of decline exhibited the slowest rate of advance. The evidence clearly marks the volatile character of prices of farm products.

What are the causes of this experience? Why are prices of farm

[1] Based upon reports issued by the United States Bureau of Labor Statistics.

products so flexible and so sensitive? The individual producer of a basic farm commodity has no control over the price he receives for his product. He sells his wheat, his corn, his cotton, his vegetables in competitive markets in which so many buyers and sellers are active that no single buyer and no single seller is in a position to exert any substantial influence on prices. The products are unbranded, without identification to tie them to a particular producer. Buyers have no affiliations with sellers. The interplay of supply-demand relationships is the impersonal determinant of price movements.

Many farm commodities, particularly food products and the raw materials of clothing, have a steady consumer demand which changes only slightly in the various phases of the business cycle. Their supply, however, fluctuates in every producing season, influenced by the acreage planted, average and extremes of temperature, the amount of rainfall, and the ravages of insects. Prices of farm products, therefore, exhibit a general inverse relationship to the quantities produced and offered for sale (including the carry-over of previous season's stocks maintained in storage). Inasmuch as the individual producer has only the choice of selling at the market price or withholding his putput from sale, and is often forced to sell at a sacrifice price to secure needed cash for living expenses, prices of farm products fluctuate rapidly and widely.

The farmer encounters certain additional difficulties when he considers the possibility of exercising conscious control over production. A business man usually meets an unfavorable price situation by curtailing production. The consequent reduction in the amount supplied exerts a buoyant effect on prices as they are influenced by supply-demand relationships. But the pressure on farmers to maintain cash income to meet fixed debt requirements (chiefly mortgages on farm properties) often induces them to increase, rather than decrease, production in a period of declining prices. This policy contributes to an increase in supply relative to demand and sets the stage for a further price decline. This, in turn, may be followed by still another increase in the quantity produced and a vicious spiral is started. It should also be observed that many farmers are discouraged from attempting crop curtailment in a period of low prices, because reduction in quantity produced results in partial unemployment for themselves and their families.

Prices of Natural Products. Prices of natural products used as the raw materials of industry as a group do not fluctuate as often or through swings of such magnitude as do prices of farm products. In contrast to the sharp reduction in prices of farm commodities between 1929 and 1933, to which attention has been directed, metal prices declined by only 20 per cent. Although this performance was not uniform among all raw material prices, the general tendency is common to the group.

Several factors can be cited in explanation. Natural products serving as the raw materials of industry are sold under conditions of derived demand. The demand for copper, that is, depends upon the demand for the finished products in which copper is incorporated. Manufacturers of electrical equipment purchase copper when they think they can sell their products at a profit. When sales prospects for electrical equipment are poor, manufacturers do not purchase copper. Changes in the price of copper do not materially influence the demand for copper. A high price for copper will not discourage purchasing if products made from copper find a ready market. A low price for copper will not encourage purchasing if products made from copper cannot be sold. The cost of copper is only part (in many instances only a small part) of the total cost of the finished product to whose excellence it contributes. Under such conditions of derived demand there is little incentive for producers to initiate changes in raw material prices in the hope of affecting demand.

This conscious control of prices of natural products is made possible by the fact that in many of the producing industries control over the bulk of the supply is retained by a relatively small number of concerns. Unlike the situation in agriculture, where hundreds of thousands of farmers compete as sellers, the limited number of producers of many natural products are in a position to control the prices of their commodities. As large and strongly financed enterprises, they can refuse to sell at low prices and wait for purchasers' offers to return to profitable levels.

Prices of natural products used as the raw materials of industry are as a class less flexible than prices of farm products used as food. They decline less in periods of industrial inactivity. They are less subject to the wild fluctuations of the highly competitive market, more under conscious control. The quantity of these commodities produced and offered for sale is the subject of planned decision by

business executives, rather than the plaything of wind, weather, and insects. The purchasers are few in number compared to the array of purchasers of farm products.

Prices of Manufactured Goods. Prices of most manufactured products are directly under the control of business administrators. One result of this conscious control may be observed in the failure of prices of finished products to decline as far or as rapidly as prices of either semimanufactured articles or raw materials during the period 1929–1933. Analysis of underlying reasons for this policy of price control reveals several influential considerations.

Fluctuations in prices of manufactured products are broadly related to the strength of consumer brand preferences. We have already observed that consumers do not regard all low-priced automobiles as being equal in value and performance. Each of the several brands of aspirin tablets has its devoted group of purchasers. Examination of past price records suggests a relationship between consumer brand preferences and price fluctuations. Those products with strongly marked consumer brand preferences have more stable prices than do other products in the purchase of which brand names are relatively insignificant. For example, the price of a nationally advertised brand of men's shirts remained practically unchanged in the decade following 1929, while prices of other makes of shirts, of comparable quality but less familiar to purchasers, declined substantially. Since manufactured goods as a class have been branded and advertised long and thoroughly, they reveal greater price stability than standardized raw materials. Among manufactured goods, those which consumers believe to be most distinctive have the greatest stability of price structure through all phases of the business cycle.

The individuality of brands of manufactured goods may be real or apparent. It may be established in consumers' minds as the result of satisfaction in use, or by carefully planned sales promotion devices. In any case, a manufacturer has the alternative of stimulating sales by lowering prices or by convincing consumers that his product is different, better, and well worth the current price. Most manufacturers appear to prefer the second policy to the first. Where the actual price policy followed compromises the two extremes, it is likely to cling more closely to stable than to rapidly fluctuating prices. This choice is dictated by business men's preference for stable as against unstable conditions, for

known as against unknown risks, and for the maintenance of existing conditions as against the uncertain future.

The conditions of monopolistic or imperfect competition existing in any industry characterized by a small number of large producers lend reason to this policy. For price reductions are a dangerous competitive weapon. If a concern reduces its price schedules, its competitors may follow, with the result that the gains are momentary. The new competitive situation finds all companies on a lower price base, with gains for none and losses for all. Sales gains which result from product improvement, or from advertising designed to create in consumers' minds an impression of superiority or uniqueness, are more lasting than those secured from a temporary price advantage.

As a result of conditions of imperfect competition, the development of consumer brand preferences, and the business man's power to exert a conscious control over the prices of his products, prices of manufactured goods are usually more stable than prices of either semi-manufactured goods or raw materials from which the finished products are made. Many writers have commented on the business preference, in a depression period, for maintaining prices and lowering output, as against reducing prices in the effort to stimulate buying.

Retail Prices. Retail prices reflect underlying production conditions and price fluctuations for agricultural commodities and manufactured goods. Two additional factors contribute to their stability. The first is the inconvenience to the retailer of frequent price adjustments. Intelligent control over his investment in merchandise is hindered by the necessity for making price changes to balance shifts in the wholesale cost of merchandise. Sales promotion efforts are weakened by inability to direct consumers' attention to familiar maintained prices. Retail price policy as a whole is complicated.

The fact that costs of operating retail stores (rent, salaries, taxes, insurance, depreciation, services, etc.) tend to remain unchanged, regardless of shifts in manufacturers' and wholesalers' prices, helps to keep retail prices stable. Of even greater significance as a stabilizing factor is the widespread consumer reliance on "customary" prices. Chewing gum, ice cream cones, and "cokes" are associated in the minds of consumers with a five-cent price. That price is likely to be maintained regardless of changes in production

costs. Slight additions to manufacturing costs are absorbed, slight decreases are permitted to add to profits. Larger cost shifts may be balanced by adjustments in the size of the product or the individual serving, in adaptations of its quality, or in the use of substitute ingredients. Great efforts are made to avoid changing such an established and familiar price.

Retail prices of farm commodities which have undergone a minimum of processing are likely to fluctuate widely. This is particularly true of perishable products such as fruit and vegetables, which reflect every change in supply-demand relationships in local markets and exhibit striking seasonal price shifts between months of large supply and months of scarcity. Such products cannot be stored and must be sold at any price, however low. Thus, strawberries command high prices in the winter months when only a few boxes are available for the luxury trade in large cities. After the growing season, the price falls sharply as supply rises to a more balanced relation with demand.

In contrast, retail prices of manufactured goods exhibit great firmness. Stability of processing and marketing costs, the possibility of storing surplus supplies, and the presence of established brand preferences all aid in minimizing price changes. This price stability is clearly marked for staple commodities. Other products in the purchase of which style is an important consideration reveal more flexible price schedules. Regardless of quality of material and workmanship, a dress in an unpopular or out-dated style can be sold only at a greatly reduced price. Prices of style merchandise are subject to sharp and rapid markdowns when the garments do not instantly appeal to customers on the basis of their appearance and the significant approval of their design by recognized style leaders and style news disseminating organs such as the moving pictures, magazines, and newspapers.

Thus, although retail prices on the whole reveal greater stability than do prices of manufactured goods, raw materials, or farm commodities, there is a wide diversity of performance between different classes of retail prices. We may compare the stability of the nickel ice cream cone with the fluctuations of fruits and vegetables in and out of season, or even during the course of a single week.

Rents and Wages. Among other important prices which deserve comment are rents and wages. Both are relatively stable

compared to most of the varieties of prices discussed in the preceding paragraphs. In the case of rents this stability can be largely attributed to the use of long-term lease contracts which often extend over a number of years. In the case of wages, contracts reached through collective bargaining, inertia, and the tendency for workers to seek to maintain dollar wage levels in periods of declining prices while employers try to maintain dollar levels in periods of rising prices, all support a broad stability. Wage rates usually lag behind broad fluctuations in the general price level. In depression periods when most prices decline, wages are among the last to be reduced. In periods of rising prices, wages tend to follow rather than lead in the schedule of price advances.

MARKET PRICES AND ADMINISTERED PRICES

Discussion of prices and price policies in recent years has centered around the distinction between those prices which are the result of the interaction of conditions of supply and conditions of demand and those prices which are determined by executive decision and are maintained with little or no reference to supply-demand relationships. The suggestive terms of "market prices" and "administered prices" have often been applied to these two types of prices. Without attempting to enter into a discussion of complex details, we may sketch the broad outlines of the distinction and indicate the significance of these prices in their effect upon the economic health of the business system.

Market Prices. Under the accepted conditions of free competition, supply and demand relationships determine prices. As those relationships change, price adjustments are readily and freely made. Under these conditions, prices are highly flexible. For any commodity sold under such free market conditions, an excess of the quantity supplied over the quantity demanded is quickly followed by a price decline which, either by inducing an increase in the quantity demanded or by discouraging suppliers, or by both effects simultaneously, brings supply and demand into equilibrium. Similarly, an excess of the quantity demanded over the quantity supplied is quickly followed by a price rise which discourages would-be purchasers and encourages an increase in the quantity supplied. Again the effect of price adjustment is to bring supply and demand into balance.

Market prices are continually adjusting to changes in supply-

demand relationships. No single seller and no single buyer can exert any material influence. Market prices are encountered among most agricultural products whose erratic price movements have been described. The history of price movements of cotton and wheat clearly reveals a picture of market prices.

Administered Prices. In contrast to market prices, administered prices are determined by executive decision and may be maintained unchanged for a considerable period of time. When the manufacturer of a branded product announces his price schedule and adheres to that schedule for a period of several months, his prices are administered. Although the manufacturer cannot completely ignore supply-demand relationships, his price schedule is clearly independent of short-time variations in those relationships. Under the terms of this description, many wholesale prices and most retail prices are regarded as administered. These prices are set and maintained for considerable periods of time. With rigid price schedules, sales fluctuations follow variations in demand.

It is important that administered prices be distinguished from the price policy of the monopolist. A monopolist may adopt an administered price policy. But so too may the members of a competitive industry, such as the automobile industry. Competitive industries characterized by a small number of large enterprises often exhibit the widespread use of a policy of administered prices. Examination of price policies throughout the American economy suggests that administered prices are often present. One study reached the conclusion that out of 747 different commodities included in the Wholesale Price Index computed by the Bureau of Labor Statistics more than half averaged less than three price changes annually.

The Foundations of Administrative Control of Prices. Administered prices are insensitive prices. They tend to be rigid for extended time periods. They do not reflect short-period changes in supply-demand relationships. It is pertinent, therefore, to inquire into the underlying conditions which make the adoption and maintenance of a policy of administered prices possible and desirable.

A primary condition for the successful application of a policy of administered prices is the presence of a small number of competing business enterprises. Competition limited in terms of numbers is supported as a basis for administered prices when the competing

enterprises are large economic units. These conditions are encountered more often in the case of manufactured goods than in the case of raw materials and farm products. These conditions are more often encountered in the case of branded consumer goods than in the case of unbranded commodities. Secondary conditions include the strength of consumer preference for particular brands and the dominance of significant patent rights held by single concerns.

The fact that these conditions are encountered through important sections of the American economy suggests the widespread use of policies of administered prices. Every study of price movements has directed attention to the increasing rigidity of prices and to the reduction in the number of commodities whose prices might be described as sensitive or flexible.

Significance of Administered Prices. The significance of widespread adherence to administered rather than market prices becomes most obvious in periods of business depression. In these years of reduced consumer purchasing power, the flow of merchandise through factories and into the hands of ultimate consumers can be maintained only with a sharp reduction of prices. High, rigid prices discourage purchasing at the very time when it is desirable to stimulate the flow of goods through marketing channels.

In support of this line of reasoning it has been observed that in depression periods those commodities whose prices fall substantially maintain sales volume at satisfactory levels while other commodities with rigid prices experience a pronounced reduction of sales. The contrast is particularly striking when agricultural products are compared with manufactured goods. Between 1929 and the Spring of 1933, for example, prices of agricultural commodities declined 63 per cent while production declined only 6 per cent. Prices of automobiles declined about 16 per cent, accompanied by an 80 per cent fall in production. Prices of iron and steel products fell 20 per cent; production declined 83 per cent. In contrast, prices of textile products declined 45 per cent, production 30 per cent. Leather prices fell 50 per cent; leather production declined 20 per cent.

On the basis of these figures, the broad generalization has been offered that in those industries in which prices dropped farthest production experienced only a small decline, while in industries in which prices were maintained, the decline in production was

great. This statement cannot, of course, be accepted without observing certain exceptions and qualifications. There are many products for which depression price adjustments are not likely to be followed by marked improvement in the rate of production. The consumption of isolated building materials depends on the general level of construction activity. A reduction in the price of a single product, such as copper pipe, would have so slight an effect on total construction costs that no significant increase in building would follow. The manufacturer of copper pipe would find no incentive to adopt a flexible price policy, except as part of an industry-wide policy which would affect all construction materials.

Furthermore, the consumption of some types of durable goods can be postponed during depression periods and is not likely to be stimulated by normal price adjustments. It has been observed that by 1932 sales of agricultural machinery had declined to 18 per cent of their 1929 level. A sharp reduction in the prices of agricultural implements might have induced a slight increase in sales (actually prices fell only 6 per cent), but farmers had experienced so drastic a decline in their cash incomes that they could not have increased their purchases materially at almost any price level. Fixed charges, such as interest on debts, taxes, and feed costs, had prior claims on farm incomes. The purchase of implements had to be deferred.

The Effects of Rigid Prices. Despite these observations, however, it has been argued that the spread of rigid, administered prices through our economy has contributed to the length and the severity of depressions. Traditionally, economists and business men have looked for a "natural" recovery from depressions as a result of increased spending induced by sharp price reductions and the general lowering of costs. It has been suggested that the maintenance of rigid price schedules (typical of administered rather than of market prices) delays necessary depression adjustments, fails to set the stage for the resumption of purchasing, and generally supports costs throughout the business system at prohibitive levels.

The dangers of this situation are pointed up by the observation that the number and extent of price rigidities are on the increase. It has been charged that they hold a prime responsibility for the failure to utilize the full capabilities of the American productive machine before 1929, and for the tragic dilemma of the following

years: idle factories and machines, unemployed workers, unused raw materials and power, and under-supplied consumers. The extension of price rigidity may be traced to a number of causes. Among them we may cite the growth of manufactured products in the list of consumers' goods, the increased amount of processing of raw materials, the reduction of price competition, and the development of strong labor organizations.

If it is true, as charged, that the extension of administered prices, and the unyielding rigidities they create, increases the fluctuations of the business cycle and prolongs the depression phase, then it becomes a national problem of first magnitude. There is no more serious problem in the entire private enterprise system than the recurring business cycle. The wastes of unemployment of resources, human and material, are nothing less than an economic crime. It is a problem which deserves the most searching examination we can bring to its study. No nation and no economy is so rich that for years on end it can squander its wealth unused. Business men must discover whether it is a sound argument which relates price insensitivity and prolonged depression. The entire area of market and administered prices must be reappraised.

As a first step, it may be helpful to survey recent trends in business cycle analysis. In considering the alternating periods of prosperity and depression, together with theories about their cause and continuance, we may well devote particular attention to the influence of prices and price movements.

BUSINESS CYCLES

Study of the history of American business reveals the regular occurrence of a series of wavelike fluctuations in business activity. These short-period fluctuations are commonly referred to as business cycles. Their significant characteristic is the alternation of periods of general prosperity and general depression extending throughout the greater part of the business world.

Characteristics of Cycle Development. The prosperity phase of business cycles is marked by a general expansion of sales and an increase of profits. This is accompanied by stability of general prices, or by advancing prices. Employment of labor and the physical resources of production advances. Prices of common stocks, as revealed by price movements on the stock exchanges, rise, reflecting heightened business activity and increasing profits.

Certain industries may not share in the general prosperity, but the broad underlying trend is clearly marked. Thus, agriculture did not participate in the general business prosperity of the nineteen-twenties, yet the presence of a prosperity phase of business cycle development was clearly marked for the economy as a whole.

Toward the close of the prosperity period, prices often tend to rise rather rapidly. Costs of production increase as business nears full utilization of physical and human resources and individual firms bid against each other for raw materials and labor. Interest rates rise and bankers tend to tighten credit restrictions. Profits exhibit a tendency to decline, or the rate of advance is slowed, and the outlook for future profits is clearly less attractive than in past years. The accumulation of stocks of merchandise through the various trade channels breeds the feeling that production should be curtailed. New construction slows. Tension in the money market heightens as the fear spreads of an end to prosperity. Often this period reaches a climax in the sensational failure of one or several large banks and investment houses, or in a sharp collapse of stock prices which is followed by a sudden loss of confidence on the part of business men.

The following depression period is marked by declining sales and consequent curtailed production. Unemployment spreads and those who retain their jobs often face wage cuts. These in turn curtail consumer buying power which leads, in a downward spiral movement, to further retrenchment in production, further wage cuts, further unemployment. Flexible prices decline rapidly while administered prices are maintained or reduced only slightly. The latter price policy often results in an unusually sharp reduction in sales volume. Bankruptcies spread throughout the business world.

How does the prosperity phase lead to revival of business activity? First, the depression phase wipes out the weakest enterprises, leading to a growing confidence in the financial reliability of those which withstand the strain. Merchandise stocks accumulated in the hands of retailers, wholesalers, and manufacturers are slowly reduced, and the resulting deficiencies set the stage for a resumption of manufacturing activity. Reduction of many cost elements, including raw materials, wages, and interest rates, restores profit margins, or, at least, makes the outlook for future profits at higher production rates somewhat more attractive.

Worn-out equipment must be replaced, thus stimulating the equipment-producing industries. Slowly the contraction changes to expansion; pessimism is replaced by optimism. The cycle passes into the expanding recovery phase in which every increase in production leads to increased employment, added consumer purchasing power, heightened consumer buying in retail stores, including the purchase of long-deferred durable goods. The prospects for higher profits in the future stimulates business investment, and the upward spiral is well on its way.

Causes of Cyclical Fluctuations. Study of the regularity of business cycle behavior has naturally led to inquiries into the underlying causes, particularly with reference to the possibility of controlling business cycles. Without entering a subject of immense complexity, we may outline a few of the better-known theories about the causes of cyclical fluctuations. These may be classified into two groups: those which emphasize factors external to the business world, and those which emphasize causes within the business world.

One of the more interesting explanations of cyclical behavior in terms of external factors is that which suggests that business cycles are caused by the relation of sun-spots to the weather. The theory suggests that variations in the presence of sun-spots create meteorological disturbances which affect the weather and, in turn, crop yields in the major agricultural industries. This creates an unbalance between agricultural and nonagricultural industries which sows the seeds of prosperity and depression.

Other explanations of cyclical behavior lean more heavily on the effects of such factors as important new inventions, mineral discoveries, and wars. In connection with wars, for example, it has been observed that the belligerent period is always one of unusually active business. Shortly after the war the adjustment to peace conditions is usually accompanied by a brief depression. This is often followed by several years of high-level prosperity which terminates in a prolonged, severe depression.

There is little reason to doubt that the changes brought about by wars, discoveries, and inventions (consider the effect of the invention of the gasoline engine and the development of the automobile industry) exert far-reaching influences on business activity. Whether in themselves they are sufficient to explain the regularity of business cycle occurrence is a debatable question.

Among the explanations of business cycles in terms of factors within the business world, we may profitably distinguish between under-consumption theories, over-production theories, and purely monetary theories.

The most popular under-consumption theory may be simply stated in the following terms: depressions are caused by the fact that consumer purchasing power in the later phase of the prosperity period is insufficient to permit consumers to buy all the goods produced by industry. As a result, inventories accumulate through the marketing channels and eventually discourage further production, which, in turn, precipitates discharge of workers, a further cut in consumer purchasing power, and business depression. The reason why consumer purchasing power is insufficient, this line of reasoning suggests, is that wages are too low, while profits are too high. Most wages are spent immediately for commodities in retail stores. But a large part of the profits are saved. As a result of saving, the community as a whole does not have enough money to buy all the goods produced.

This theory is often supported by reasoning which asserts that the saving habit would have no ill effects if business concerns followed a policy of reducing prices. But the presence in the economy of administered prices introduces elements of rigidity. As a result, that part of the national income which is spent for commodities is not enough to purchase the full output of our productive plant. This is, of course, an over-simplified statement of a closely reasoned theory. It does serve the purpose of outlining the trend of thought held by those who seek to explain and control business cycle phenomena in terms of under-consumption.

The over-production theory can be described in the following terms. In our capitalistic economic system, factories must be built, tools and equipment must be purchased, and raw materials must be accumulated far in advance of the manufacture and sale of finished consumers' goods. Sometimes the initial investment is made several years before the sale of the ultimate product. As a result of this necessity to forecast the future, miscalculations occur. The producing mechanism plunges ahead for a period of rapid expansion. But some investments are discovered to have been made on the basis of over-optimistic forecasts of future prospects. The factors of production have expanded too fast. More production facilities are available than can be used profitably. There

follows a period of caution. Business men cease to expand operations. Investment in producers' goods slackens. This throws men out of jobs. Consumer purchasing slackens, further darkening the prospects for profitable investment, and the stage is set for depression.

The explanation of cyclical fluctuations in terms of monetary factors attributes the alternation of prosperity and depression to the expansion and contraction of credit by the commercial banks. In the prosperity phase of the business cycle, speculative activity by business men is fostered by the readiness of commercial bankers to lend money. The expansion of credit leads to quickened business activity which grows on itself, credit and business expansion advancing simultaneously. Advancing costs of raw materials, machines, plant, and labor all increase the amount of working capital required to operate business units, and the commercial banks are called upon to support these requirements.

Some bankers lose confidence. They perceive that many business units have borrowed beyond the limits of prudence and safety. They begin to call in their outstanding loans and to refuse to make new ones. Bank credit contracts as fast as it had expanded. Business must pull in its advance commitments as every enterprise strives to liquidate its assets and turn all into cash. A deflationary process is initiated which persists until confidence is again restored by the possibility of earning profits. Finally the stage is set for a fresh expansion of credit and a new period of prosperity.

Variations of this monetary explanation direct attention particularly to the volume of business debt which mounts so rapidly in prosperity periods and declines with equal speed in depression periods. They point out that debt expansion breeds further expansion, while debt contraction breeds further contraction, so that both phases of the cycle are for a period moved by self-generating forces.

The Central Role of Prices. Whatever the basic theory relied on to explain cyclical fluctuations — and it may not be unwise to suggest that all theories have a kernel of truth and that all factors contribute to the complex phenomena of the business cycle — prices occupy a central position. As we have already observed, the essential process of the capitalistic, free enterprise system is the making of investments in advance of returns. The outlook for profits is the dominant influence determining advance commit-

ments. When business men think they can earn profits, they invest, build plants, buy raw materials and tools, hire workers, and offer goods for sale. When the profit outlook is black, business men refuse all possible commitments.

But we know that profits are made possible by favorable price relationships and rendered impossible by unfavorable price relationships. In the early stages of a period of prosperity, rising prices create optimistic forecasts of future profit possibilities. The margin widens between production costs and selling prices. But in the later stages of the prosperity period, full employment of productive resources induces competition for raw materials, machines, and labor. This, in turn, drives up their costs and the profit margin narrows between total production costs and selling prices. The margin is further narrowed by rising interest rates and, possibly, by a deficiency of consumer purchasing power (see the underconsumption theory already described). If, at this point, a contraction in bank credit is initiated, the expansion movement will be brought to an abrupt termination.

In the early stages of depression the sales outlook is so gloomy that no future profits can be anticipated. Later, reduction of costs, depletion of accumulated merchandise inventories, the necessity to replace wornout plant and machinery; possibly the appearance of important new inventions ready for business exploitation, a favorable agricultural situation, a political overturn that inaugurates a new feeling of confidence,[1] the piling up of bank reserves available for new credit expansion, renewed faith in those business units which have "gone through the wringer" successfully — all these factors contribute to a new hope for future profits and a new expansion of business activity.

Realization of the fundamental importance of prices in cyclical fluctuations redirects our attention to the serious problems which have followed the extension of the number of administered prices in the economy. For rigid, insensitive, or "sticky" prices delay depression readjustments. The policy followed in a number of industries of maintaining prices, decreasing production, and discouraging employees in a depression period, rather than sharply slashing price schedules and striving to keep production going, probably contributes materially to the severity and the duration of the depression

[1] Witness the remarkable change in national morale following the inauguration of Franklin D. Roosevelt in March, 1933

phase of the business cycle. The attitude of many groups in the family of organized labor makes the situation worse. They have followed the business man's policies in their attempt to maintain wage rates at the expense of the possibility of spreading employment at substantially lower wages. Their fear of losing the fruits of previous hard-fought battles to lift wage rates is understandable. But the result is nevertheless unfortunate from the standpoint of the economy as a whole.

QUESTIONS, PROBLEMS, PROJECTS

A

1. Why are prices significant?
2. Do farm prices usually fluctuate more or less than other kinds of prices?
3. How did the fluctuations in farm prices for the period 1929–1935 compare with the fluctuations of other prices?
4. Give three reasons why farm prices fluctuate more than other prices.
5. Compare demand conditions for farm products with demand conditions for clothing.
6. How did the price for metals behave between 1929 and 1933?
7. Why don't changes in the price of copper materially influence the demand for copper?
8. Compare the supply conditions of farm products with the demand conditions of raw materials.
9. Do strongly marked consumer brand preferences tend to make prices more stable or less stable? Why?
10. What do retail prices reflect?
11. Define the term "customary prices."
12. What influence does style have on the flexibility of price schedules?
13. Why do wages remain relatively stable?
14. What are "market prices"?
15. What kinds of industries most frequently employ the policy of administered prices?
16. Name two secondary conditions.
17. Why does the maintenance of rigid price schedules increase the severity of depressions?
18. Describe conditions of prices for all goods and services in periods of prosperity.
19. Describe the process of working from a period of depression back into a period of prosperity.
20. Explain the under-consumption theory.
21. Explain the theory that cyclical fluctuations are caused chiefly by the gradual expansion and sudden contraction of credit by commercial banks.

B

1. Does the fact that farm prices are very flexible have any bearing on the AAA and subsequent farm legislation?
2. How do you account for the fact that there was a relatively slight decline in prices in the construction business from 1929 to 1933? Does the fact that there are strongly established craft unions in this area have any significance? What?
3. List some commodities which have so-called "administered" prices.
4. Is there any competition in the automobile industry? Is it price competition? If not, what kind of competition is it?
5. Variations in style produce great flexibility in prices. What significance does this fact attach to the technique of field research?
6. Is competition exclusively in the area of brands and trade names desirable from the consumers' point of view? Why?
7. Comment on the desirability of an extension of advertising and other promotional devices as a method of keeping constant the volume of sales in a depression without a decrease in prices.
8. Is inflexibility of prices in a depression desirable from any point of view? Explain.
9. What influence do labor unions have on the inflexibility of prices in times of depression? Is their policy defensible?
10. What effect does advertising have in maintaining price-levels in times of depression? Is this desirable?
11. If wages lag behind prices, what will be the result — especially if the prices become fixed at a level far above wages?
12. If bankers begin to tighten their credit policies, does it indicate that they have more or less confidence in the national currency? Why?
13. Comment on the policy of maintaining prices and decreasing production, rather than cutting prices and attempting to maintain the old volume of production.
14. Name some products in which price competition exists. Name some products in which name competition exists. Which kind of competition is more prevalent in our economy? Why?

C

1. In the light of this chapter and other readings, what is your analysis of the cause of depressions? What is your suggestion as to a cure or preventive?
2. Investigate the price policies of the California Fruit Growers' Association. Are they in any sense justifiable? Are they beneficial from the point of view of the country as a whole?
3. What is the justification for federal legislation which restricts the supply of farm products while the feeding of millions of unemployed persons remains a serious problem?
4. Write a short paper on the restriction of both long and short-term credit as a preventive of depressions. How might such a restriction be effected?

5. Comment on the policy of labor unions which refuse to reduce wage levels in times of severe depressions. What effect, if any does this policy have on the volume of unemployment? From what points of view is this policy defensible? From what points of view is it reprehensible? Explain.

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CHAPTER 27

RISK

It should now be apparent that almost all business activities are marked by risk and uncertainty. Fire may destroy the entire physical plant of a manufacturing establishment. The farmer's crop may be destroyed by drought or cold or insects. The retailer's stock of dresses shrinks in value if the caprice of customers favors styles not present in his selection. The merchant with a storage warehouse full of goods may watch, helpless, a swift collapse of prices which reduces the value of his investment below its cost. Seasonal fluctuations in particular industries, cyclical fluctuations for all business activity, cause unexpected changes in sales and profits of individual concerns. Strikes, wars, and national policy all may bring about unanticipated shifts in supply, demand, costs, and selling prices.

These are all common business risks. Some lines of business are riskier than others. Some types of risk are more serious or more costly than others. But it is difficult to imagine any industry or any business activity which can be carried on free from all risk. There is, indeed, a general relation between profit and risk. With only a few exceptions, those areas of business in which the risk element is unusually important ordinarily return a high rate of profit to the firms which assume the risks successfully. Those areas in which the risk factor is at a minimum ordinarily exhibit a low average rate of profit. This relationship between risk and profit is not universally maintained, but it is obvious that only the hope of earning a very high rate of return on invested capital will induce a business man to assume great risks.

CLASSIFICATION OF RISKS

As an aid in understanding the number, variety, and seriousness of business risks, it may be helpful to attempt to classify them by types. Such a classification may also aid in determining the extent to which business men can protect themselves against the full impact of risk.

Risks Arising from Natural Causes. A group of common business risks can be traced to natural causes. Farming is a hazardous occupation because of the effect on crops of variations in temperature, as when excessive heat reduces yield per acre or untimely frost destroys orchard fruits; of excessive or insufficient rainfall; or of the invasion of planted fields by swarms of insects which destroy the crop before it can be harvested. Other industries are subject to risks arising from natural causes. Ships and their cargoes are lost at sea in storms. Spring floods destroy or damage factories, wholesale, and retail establishments, together with their merchandise. Winter snow storms delay traffic on railroads and highways, increase the accident rate, and add to operating and maintenance costs. The list of the number of business risks traceable to natural causes can be illustrated by experiences drawn from hundreds of industries.

Physical Property Hazards. Another group of common business risks may be classified as physical property hazards. In this group can be listed risk of loss due to fire, theft, failure of equipment, strikes and other public disturbances, and similar causes. While all business units are subject to most of these risks, some are particularly vulnerable. In certain industries which must handle inflammable materials, such as paints, risk of loss by fire is paramount. In the operation of small retail stores, particularly those which are open late in the evening, the danger of loss by holdup is always present. Broken water mains may flood storage areas and cause serious damage to merchandise. Property is often damaged during strikes which flare into violence.

Risks Arising from the Character of Capitalistic Production. Still a third class of business risks may be traced to the essential character of capitalistic or roundabout production. The necessity for investing in plant and equipment, raw materials, and labor power in advance of the sale of the finished products forces business men to forecast the quantity of consumer demand, as well as its style and price preferences. Intelligent management utilizes every means at its disposal to aid in making accurate forecasts. Records of past sales, surveys of competitive offerings, consumer questionnaires, and many other devices are frequently employed. They may lessen the risk; they do not entirely remove it.

Risks Arising from Price Fluctuations. A fourth important class of business risks arises out of the uncertainty of price move-

ments. Every business man who owns merchandise, whether it be raw materials, semifinished goods, or fully processed commodities, must shoulder the risk of a price decline. A textile manufacturer plans his season's production with the greatest care, considers style and design, quantities which may be demanded in every market, and then is faced by an unforeseen and precipitous decline in cotton prices which shaves 30 per cent from the value of cotton previously purchased and now in storage awaiting manufacture. Anticipating a period of rising prices, a retail merchant buys six months' supply of linens and domestics. But the price trend reverses itself. Retail prices fall. His competitors, following a hand-to-mouth buying policy, threaten to undersell him. If he maintains prices high enough to retain a profit on his merchandise, his sales volume will shrink. If he meets competitors' prices, his income will be insufficient to cover both merchandise and operating costs.

Personnel Risks. A fifth class of business risks has its origin in personnel failures. The loss of key men in executive positions is a serious blow to any concern. "One-man" businesses, and those which have centered authority in a few hands without providing for the training of capable replacements, incur a particularly severe risk. Danger from this class of risk may extend well down the executive staff, as in the case of a manufacturing concern employing in important positions a large number of junior engineers who hold commissions as reserve officers. In time of war, the engineering staff may be suddenly depleted and the smooth flow of technical operations disturbed, despite the continuance of top executive personnel. We may include in this class of risks the danger of industrial accident to employees exposed to dangerous conditions in their daily tasks.

Risks Arising from Shifts in Public Policy. Still another class of business risks may be traced to shifts in public policy. New legislation, local, state, or federal, may force changes in methods of doing business, in costs of production, in pricing policies, in the conditions of employment for labor. A new tariff act may upset an established industrial structure. Changes in tax measures affect cost calculations. If carried through to selling prices, they may force changes in forecasts of sales. The shift from a peace to a war economy in 1941 forced upon American industry changes of such far-reaching significance that the whole foundation of business administration had to be recast.

Risks Arising from Competition. In addition to the major classes of risk described in the preceding paragraphs, it may be helpful to classify separately a number of risks, the origin of which can be traced to competition. Technological changes, inventions, and the development of new products introduce a high degree of risk in competitive industries and even extend their effects into industries which are monopolistic in character. Thus, the invention of a technique for extracting nitrogen from the air crippled the Chilean nitrate industry in the nineteen-twenties and threatened the economic well-being of an entire nation. The invention of the radio and the rapid growth of the radio industry undermined the piano industry and led to the forced retirement from business of many of its long-established units.

Improvements in machinery which displace hand labor or established machine techniques may upset the competitive structure of an entire industry. So, too, may developments in consumers' goods which cause major shifts in consumer buying. These shifts may be from one brand to another, or they may be from one class of product to another class. All these risks may be conveniently grouped as risks arising from the play of competition.

CONTROL OF RISKS

The full impact of these risks would make the operation of business so hazardous and so costly that many enterprises never would be undertaken while others would be forced to charge extremely high prices for their goods and services. From the earliest recorded history of business operation, therefore, business men have been engaged in an unceasing search for ways and means to avoid, remove, diminish, or share risks. The goal of all these efforts has been the substitution of a known cost for an unknown risk, or, as an alternative, the accumulation of a reserve fund as a cushion against the impact of the unforeseen and the unexpected.

Insurance, research, preventive action, accumulation of reserves, and many other devices have been utilized in the control of risks. Not all risks can be eliminated. But most risks can be brought under a measure of control sufficient to reduce them to manageable proportions and to render the operation of business enterprise, under the guidance of capable, prudent administration, sufficiently safe to attract capital.

Insurable and Non-Insurable Risks. Business hazards can be classified into two broad groups of insurable and non-insurable risks. An insurable risk is one for which insurance companies, specialists in risk assumption, are prepared to guarantee payment sufficient to cover part or all of the loss suffered by an insured person or organization. In general, insurance is available for all risks the proportional incidence of which can be predicted in advance. Thus, a life insurance company does not know which of its policyholders will die in any given year. It does know the probable mortality rate among policyholders in the various age groups. A fire insurance company does not know which pieces of insured property will go up in flames in any year. It can anticipate the proportion of all pieces of property which are likely to be destroyed. In the class of non-insurable risks may be grouped all other business hazards which specialists in risk assumption are not willing to underwrite on a formal basis.

The Theory of Insurance. The foundation of insurance is the sharing of risk. Suppose a manufacturer owns a plant worth $300,000. A devastating fire might destroy the plant which the available funds of the enterprise would be insufficient to replace. The actual occurrence of fire in this plant cannot be anticipated. Among 20,000 such industrial plants, however, the proportion that will be destroyed by fire in a three-year period can be predicted with reasonable accuracy, on the basis of records of fires in previous years. Probable fire losses among 20,000 manufacturers can be met if each manufacturer contributes a small proportion of the value of his plant. This annual payment, known as a premium, will provide a total fund out of which payments can be made to cover the losses suffered by those contributors who actually experience fires.

Thus, rather than forcing a single concern to shoulder the risk of being wiped out by an unpredictable event, a group of firms pool their risks. They substitute a known and predictable cost, the annual premium, for an unknown and unpredictable risk, the chance of destructive fire. The cost of the insurance premiums can then be entered in the expense schedule with the other costs of doing business, which must be covered by income before the enterprise returns a profit.

Wherever probable losses can be predicted among a group of individuals or business organizations, they may be shared by all

members of the group. The agency which makes possible this sharing of risks is the insurance company. The known cost, substituted for the unknown risk, is the annual premium. The essential basis of organization is the inclusion of a group large enough to permit the sharing of risk in accordance with the established incidence of loss, and to cover the necessary expenses of administration. Death, fire, weather, accident, theft, shipwreck, bad debts, broken contracts, public liability, fraud, and many other risks can be insured in this fashion. It is common business practice to take out insurance against all business hazards which threaten losses greater than can safely be handled in the ordinary course of operations.

Types of Insurance Companies. We can distinguish two important types of insurance companies: stock companies and mutual companies. Stock companies are organized corporations which secure their initial capital by the sale of stock to investors, and which attempt to earn a profit through the collection of premiums from policyholders in amounts in excess of payments of benefits, costs of administration, and the accumulation of required reserves. In mutual companies, the policyholders are the owners; there are no independent stockholders. Profits in excess of benefits, costs, and reserves are returned to policyholders either as deductions from annual premiums or as additions to the value of their policies.

In addition to these two major types of insurance companies, mention should be made of the practice of re-insurance. When insurance companies assume risks which for any reason are considered excessive, they frequently share the risks by re-insuring part with another insurance company. Some organizations specialize in handling only re-insurance business. Others accept re-insurance business in a special division of their organizations.

Self-insurance. Many of the larger business enterprises follow the practice of self-insurance. A company operating hundreds of retail stores scattered throughout the country may attempt to save administrative costs and profits normally accruing to fire insurance companies. It can follow accepted insurance principles, calculate the probable rate of fire hazard and the potential loss, and set aside annually a fictitious "premium" accumulated in a fund out of which payments are made to cover actual fire losses. This is sound procedure if the company's operations are widespread and the properties distributed in such a way that the statistical summary of

past fire losses can safely be projected into the future. It is also necessary to maintain insurance reserves in liquid form, so that they are instantly available to cover losses. A company with a concentrated risk in a very small number of properties cannot safely practice a policy of self-insurance.

Volume of Insurance Coverage. The extent of insurance coverage in the United States may be suggested by a few figures. Life insurance currently in force in the United States is in excess of 100 billion dollars. This insurance is held by more than 60 million individuals, many of whom own several policies. Annual premium payments for all types of insurance exceed five billion dollars. Those unfamiliar with the growth and complexity of insurance practice often are unaware of the variety of business risks which may be shifted or shared by means of insurance. A few of the more important types of insurance will be briefly described in the following paragraphs.

Fire Insurance. Fire insurance is among the common means of protecting physical property. The standard fire insurance policy covers loss attributable to damage from fire, smoke, and water. It is issued for a specific piece of property which has been carefully examined prior to the issuance of the policy. The examination extends to the type of construction, nature of building materials, use made of the structure, and type of roofing, heating equipment, and similar features which may affect the occurrence of fire or the ease with which it might spread. Rate differentials are based upon the consideration of the risk established by these factors. A further distinction in basic premium rates is established for different communities. Consideration is here given to the efficiency of the local fire department, availability and reliability of the water supply system, building regulations, and similar factors.

Under the terms of the standard policy it is incumbent upon the owner of insured property which has suffered from fire to notify the insurance company immediately, to protect the property from further damage, and to supply a proven inventory and valuation of the destroyed and damaged property. An insurance company adjuster is assigned to determine the amount of the loss. If company and insured agree on the valuation, payment is made within sixty days. Failure to agree is followed by resort to disinterested appraisal.

A particularly interesting feature of many fire insurance policies

is the coinsurance clause. Most fires cause only partial loss of insured property. As a result, there is a tendency on the part of property-owners to underinsure, that is, to insure the property for less than its full value. This places on the insurance company the danger of collecting inadequate premiums from some policyholders, which, in turn, endangers the security afforded other policyholders by the maintenance of adequate reserves.

To discourage this practice, a coinsurance clause is included in the contract. Under the terms of an 80 per cent coinsurance clause, at least 80 per cent of the replacement value of the property must be insured if the owner is to collect full damages for loss covered by the amount of the policy. If the amount of the policy is less than 80 per cent of the value of the property, the insured can collect only a portion of the loss. This proportionate claim is usually determined by the application of the following formula:

$$\frac{\text{Insurance carried}}{\text{80 per cent of replacement value}} \times \$\ \text{loss} = \text{insurance company's liability}$$

If a property worth $50,000 were insured for $25,000, and a loss of $20,000 were sustained, the insurance company would be liable for only $12,500.

$$\frac{\$25{,}000}{\$40{,}000} \times \$20{,}000 = \$12{,}500$$

Consequential Losses. The standard fire insurance policy agrees to reimburse the owner only for direct damage resulting from a fire. But certain consequential losses follow the interruption of business. Business operation is interrupted and may be brought to a complete standstill. Income and profits cease. But many overhead expenses continue. Protection against this type of risk may be secured through a "use and occupancy" policy.

Many fire insurance companies also sell policies offering protection against such hazards as earthquake, cyclone, flood, explosion, riot, and similar risks. In some cases, coverage against these risks is provided by brief contracts attached to the fire insurance contract form.

Casualty Insurance. The term "casualty insurance" covers another important division of the function of risk-sharing. It includes automobile insurance, public liability insurance, burglary and theft insurance, and others. All these varieties of casualty

insurance are handled by a single concern. Rates vary in accordance with the risk. Thus, burglary and theft insurance rates are adjusted to the nature of the business, the number of protective devices, the surroundings, and similar factors. Automobile insurance is more expensive in urban than in rural areas.

Workmen's Compensation Insurance. State laws impose upon business responsibility for compensating workers or their families for personal injury, ill health, and death occurring as a result of the conditions of employment. The underlying theory suggests that the cost of industrial accidents should be treated as part of the expenses of production. Except in clear cases of planned refusal to abide by safety regulations, little attempt is made to free business concerns from full responsibility for accidents. Ordinarily, compensation is paid to workers up to two-thirds of their average earnings, in addition to the costs of medical care. In case of fatal injuries, death benefits are paid to the worker's family.

To meet the financial obligations created by these laws, business concerns usually purchase workmen's compensation insurance. Premiums charged for this type of insurance vary with the accident record of the industry, the accident record of the specific concern, the nature of the work, and the size of the pay roll. Through their power to refuse certain risks, insurance companies are in a position to force the creation and maintenance of safe operating conditions.

Group Life Insurance. In business, life insurance has been used to assure compensation for the loss of key men whose death would seriously hamper continued effective operation. It has also been used in setting up group life insurance plans covering large numbers of employees within a single business concern. This use of life insurance is usually regarded as a desirable addition to a rounded personnel program, to improve employee morale and build loyalty. For the employee, the group life plan offers security at very low cost.

More than 25,000 companies have sponsored group life programs covering more than 10 million employees. A minimum of 50 employees is required for a group life plan. Ordinarily, medical examination is not required. Basic premium rates vary by industries, reflecting special hazards, age distribution of the insured groups, sanitary conditions, and similar factors. Premium costs are lower than for individual policies because of the reduction in selling, medical, and administrative expense. For most group

life policies, the expense is shouldered by the employer. In some cases, employees share the expense.

Fidelity and Surety Bonds. Dishonesty of employees and failure of business men and organizations to perform contractual obligations are recurring business risks. Protection against these hazards is offered by surety companies. A fidelity bond offers to an employer a guarantee against loss arising out of dishonesty on the part of an employee. A surety bond guarantees the performance of a contractual obligation.

Marine Insurance. Marine insurance is another important division of the risk-sharing function, and one of the oldest in terms of continuous use by business men. It offers protection to shippers against the risk of loss at sea. The marine insurance policy covers such risks as sinking, collision, fire, contact with water, piracy, and mutiny.

This brief summary of insurable risks does no more than hint at the range, variety, and flexibility of formal insurance devices for sharing or shifting certain types of business risks. One general underlying principle can be observed wherever business men resort to insurance of a control technique: insurance makes possible the substitution of a known and predictable cost for an unknown and unpredictable risk. But the list of risks which can be controlled by means of insurance is, in reality, only part of the total array of risks which make hazardous the daily operation of business enterprise. We must now consider a variety of risks for which no formal insurance protection is available.

The Elimination of Risk. Certain risks can be eliminated by careful management and advance planning. Industrial fire hazards may be greatly reduced, if not entirely eliminated, by special construction methods and materials. Risk of loss from insects and disease is forestalled by the farmer who selects special varieties of seed and sprays the growing crops. Dangerous industrial machinery may be screened to prevent accidents. Those who anticipate drought can dig irrigation ditches and storage reservoirs; those who anticipate floods can build dams and levees. Technical developments in refrigeration can be utilized to eliminate risk of spoilage in handling perishable merchandise.

Throughout the area of business activity, physical risks can be eliminated or reduced in this way. But there are many other risks which the business manager must control, lest they overwhelm the

enterprise under his direction. There are risks of competition, risks of personnel, risks of consumer markets, risks of price fluctuation, risks of national policy, and many others. What can the business manager do to extend his control over such hazards as these?

Control of Risks of Competition. We have already observed that technological changes and the development of new products introduce special risks in business. In competitive industries, constant pressure is exerted to speed these changes. They offer the best opportunity for one firm to reduce its costs, extend its sales, and multiply its profits, while competing concerns stand by. In a competitive industry, the price of failure to compete is eventual elimination of the non-competing firm. There is no insurance which guarantees that existing techniques of production, existing cost structures, and existing patterns of commodity development will be maintained without change. It is the rule, rather than the exception, that change, invention, improvement, and innovation will threaten every established position. Nor are these risks absent from non-competitive industries. There is always the possibility of a substitute product from another industry invading a protected consumer market. Aluminum utensils may be produced and sold under non-competitive conditions, but what about utensils made from glass or other materials?

The only effective way to control competitive risks is by a concerted program designed to bring research, product development, and innovation into a dominant position in every enterprise. Among the larger industrial concerns management policies indicate a recognition of the significance of this type of insurance against the risks of competition. Many of our larger enterprises have directed substantial sums into research activities, often engaging in "pure" research of a type which does not promise immediate practical results. Product improvement and the development of new commodities have held an important place in well-managed organizations. Some smaller enterprises have followed a similar path. Many have been handicapped by inability to divert the working capital necessary to finance research, while others have suffered from the lack of vision of administrative officers.

Control of Risks of Personnel. Personnel risks of the type described earlier in this chapter can be prepared for by a training program extending from top to bottom of a business enterprise.

At every level of employment men should be trained for advancement. Loss of existing personnel cannot be anticipated. Loss of key men through death, retirement, or transfer to another concern may halt operations vital to the success of a firm or necessitate the deferment of plans for the future conduct of affairs. It has been suggested, with sound logic, that the "one-man" business — the business with the indispensable boss — supports risks at least as great as does the one-plant firm which fails to carry fire insurance. The result of the training program of one great industrial concern has been described in the following terms: "When the president retires, we hire a new office boy." The theory of preparation for advancement, in every rank from top to bottom, which that statement implies should be basic administrative policy in every well-managed business.

Control of Risks of Consumer Markets. Every business enterprise is engaged in selling something, whether it be commodities or services. The most effective selling is done by those with the best understanding of the likes, preferences, habits, and changing attitudes of their present and prospective customers. Failure to maintain full knowledge of the existing pattern of consumer demand and to anticipate approaching changes in buying preferences introduces a serious element of risk. The dress manufacturer or the dress retailer who does not offer styles which secure popular acceptance records few sales and earns no profits. The automobile manufacturer who fails to interpret consumer style preference will experience a disastrous year. Even for such staple products as packaged foods, risks arise in connection with changing taste and flavor preferences, container type and size preferences, seasonal fluctuations in demand, and purchasing habits with respect to type of retail outlet patronized.

The only protection against this class of risk is ceaseless market research which probes into buying habits and aids in anticipating future trends. This applies to industrial as well as consumer markets. It applies to all type of commodities, both style and staple. It applies to automobiles and dresses and groceries. Information may be secured directly from consumers by questionnaires and related techniques. It may be secured from sales records. It may be secured through observation. A business enterprise may initiate and carry through its own research program or it may call upon commercial research agencies and style report-

ing services. In every instance the means must be adapted to the requirements. In our dynamic economy of free consumer choice it is perilous for a business enterprise to lose contact with consumer preferences.

Control of Risks of Price Fluctuations. Price fluctuations must be listed among the most serious risks with which the business man has to contend. Every business organization which owns commodities, from raw materials to finished products, operates under the shadow of the risk of a depreciation of inventory valuations caused by a fall in prices. In many such situations, price movements are beyond the control of the individual business man; in others, his control is only partially effective at best.

Business men attempt to secure some control over risks of this character by careful planning, searching study of trends and possibilities, and the exercise of shrewd judgment in the administration of their affairs. Sound planning and forecasting help the business executive to anticipate price trends. Accurate prediction of advancing prices enables an enterprise to expand inventories to take advantage of a buoyant market. Accurate prediction of declining prices enables an enterprise to contract inventories and minimize losses. The full effect of price shifts cannot be entirely eliminated, it is true; but excessive strains can be avoided, losses can be minimized, and the residual shocks can be handled through the creation of reserves designed to serve as shock absorbers for emergencies.

To some extent, risks resulting from price fluctuations can be controlled by the use of long-term contracts. A concern which starts its manufacturing only after receiving firm orders at specific prices has substantial protection against the risk of price decline. This is a useful practice, but not all concerns can operate in this fashion. Customers may be unwilling to commit themselves for an uncertain future[1] or may be in a position to insist on immediate delivery from suppliers. Competitors may yield to this pressure and thus make it impossible for any single concern to attempt to protect itself against price risks in this way.

Nevertheless, one can discover rather wide use of long-term contracts as a risk-reducing device. Mining companies often enter into long-term contracts to supply specified tonnage at specified

[1] Note that such long-term contracts at fixed prices do not really eliminate the risk of price change. They merely *shift* the risk from seller to buyer.

prices. Farmers contract with canners for the sale of their crops. Manufacturers contract for the purchase of raw materials and supplies. Throughout the business world there is constant effort to shift price risks by long-term contracts. Since every shift necessarily involves the acceptance of risk by another concern, competitive strength and strategic bargaining positions are determining factors.

Attention should be directed to the special price-protection device known as hedging. Because of the complex nature of the hedging technique, no attempt will be made to describe it in the present chapter. In general, however, it may be said that hedging is a technique which enables certain business men to protect themselves against unforeseen declines in price. Hedging may be carried on for all commodities which are sold on organized exchanges which provide both a cash market and a future market. Wheat, corn, cotton, and many other products are sold on cash markets *for immediate delivery*, and *promises to deliver* the same products at a specified future time are bought and sold on futures markets. Business men handling any of the commodities for which both cash and futures markets are available can secure partial — in some cases, complete — protection against the risk of loss from price decline by matching a sale in the future market against every purchase in the cash market, a purchase in the future market against every sale in the cash market.[1]

Conclusion. The development of insurance has not resulted in the elimination of all business risks. Risk appears to be an inescapable characteristic of the private enterprise system. Many risks can be shifted by means of insurance companies, thus enabling business men to substitute a known cost for an unknown risk. Other risks can be avoided or minimized by skilled management. Good judgment remains the secret of successful business administration, for over a long period of years profits are a measure of administrative success in appraising and controlling those risks for which no insurance is available.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What are some common types of business risks?
2. What are the important types of physical property hazards?

[1] For a complete description of the hedging technique, see any general text on Marketing Principles.

3. What types of risks arise from price fluctuations?
4. What types of risks arise from shifts in public policy?
5. Distinguish between insurable and non-insurable risks.
6. How does a life insurance company share risks? A fire insurance company?
7. How does a fire insurance company determine premium rates?
8. What is meant by re-insurance? Why is it used?
9. What is meant by the coinsurance clause? Why is it used?
10. What is casualty insurance?
11. Describe the operation of group life insurance.
12. What devices or policies do business men use to control the risks of competition?
13. How can business men control risks of price fluctuation?

B

1. Why does risk appear to be associated with the private enterprise system?
2. What connection exists between the number, variety, and severity of the risks encountered in an industry and the average rate of profit earned by concerns in that industry? Why?
3 Can all risks be eliminated from business? Why?
4. Why do we say that insurance makes possible the sharing of risk? Why not the removal?
5. Should business men attempt to insure against all risks for which insurance is available? Why? What criteria should be used in the selection of types of insurance coverage to be purchased?
6. How does insurance reduce operating costs of business concerns?
7. Discuss the development of a system of self-insurance by a large retail chain store organization. To what types of risks, if any, should it be applied? What types should not be brought under a self-insurance system?
8. What risks are faced by an insurance company? How can they be controlled?
9. What are the costs of controlling non-insurable risks?
10. Are there any social risks similar to the risks of private business? What are they?

C

1. Classify all varieties of risk faced by a large manufacturer. Indicate those for which insurance is available.
2: Write a paper on the selection of personal life insurance coverage. Describe the various types of insurance available, and appraise their value in a well-planned life insurance program.
3. Analyze the non-insurable risks assumed by a large industrial concern in your home town.

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PART SEVEN

BUSINESS AND GOVERNMENT

Government is related to business in two ways. First, government aids business to operate safely, continuously, and successfully. Second, government regulates business to prevent it from harming society, individuals, and isolated business units. In performing these dual functions of implementation and regulation, government has developed a complex administrative and legal structure. This structure of business-government relationships may be regarded as the code of rules which governs the policies and the actions of business men.

Part Seven considers the development of business-government relationships, current trends, and the probable shape of things to come. It discusses the possibilities of planning in the free enterprise system — planning by both individual concerns and governmental divisions. Finally, it describes the special business problems of the war economy in which business is now functioning.

CHAPTER 28

BUSINESS-GOVERNMENT RELATIONSHIPS

We can now recognize that business activity is part of the larger framework of social activity. In the dynamic organism of American society, business men and business units play a vital part. What they do affects all of us, the way we live, the commodities and services we enjoy, our ability to purchase, our security, our comfort, and our morale.

Accepting this relationship, we must therefore recognize that business and government have mutual interests and mutual responsibilities. Business operates within the frame of rules and regulations set up by government. Business operates through the provision of governmental services and under the protection of governmental powers.

We also know that the character of these business-government relationships is continually changing. Broadly stated, we are in a period of increasing governmental regulation of business. This is a long-time trend which can be traced in its development back to the Civil War period or even earlier. There are some who believe that the trend is the natural and inevitable result of the growth of the capitalistic, mass production system. Others believe that the trend represents a usurpation of power by a group dedicated to the ultimate destruction of the free enterprise system. Still others take the long view; they believe that "This, too, shall pass." They regard all developments in business-government relationships as temporary, subject to reversal and readjustment.

As far as the business man is concerned, the daily, monthly, annual set of business-government relationships represents the changing conditions within which management must function and business must operate. These are risks of public policy to which all economic activity is subject. Regardless of trends, regardless of their ultimate rightness or wrongness, they must be accepted and adjusted to.

From either the social or the individual point of view, therefore, business-government relationships are well worth examination.

As students of social organization, as future business executives, as participants in the economic life of our country, it is important for us to know something about the background, the historical growth, the current trends, the specific legislation, and the probable future developments in this area. Certain aspects of business-government relationships, together with the legislation designed to implement public policy, have already been considered in connection with the discussion of monopoly and competition. It is now time to extend our discussion to cover the entire range of problems encountered in this area.

HISTORICAL DEVELOPMENT

Since the close of the Civil War era, the balance of business-government relationships in the United States has been changing. In these eight decades we have seen the development of state and federal control of public utilities and railroads. Following the organization of giant business combinations, there have been enacted antitrust laws, fair competition laws, and other control legislation. In the same period flood prevention, irrigation, reforestation, and land reclamation have become significant public interests, subjects for governmental action. The private banking system has been brought, to a large extent, under the control of the Federal Reserve System. Our legislatures, federal and state, have enacted pure-food laws, minimum-wage laws, conditions-of-employment laws, and legislation providing for the arbitration of industrial disputes. International trade in the broad sphere, city zoning and public health in the narrow, have come within the area of public control. Social insurance, the distribution of wealth, and the solicitation and direction of investment funds have all been subject to legislation.

Causes for the Growth of Government Control. Whatever the character of specific pieces of legislation, whoever may have been the proponents or the beneficiaries, the underlying trend is unmistakable. One can, if he likes, list dozens of responsible causes. Many of the more significant factors, however, may be grouped under four major headings. One is certainly the organization of mass production founded on the power-driven machine and the minute subdivision of labor. A second is the growth of giant corporations operating across state lines, beyond the effective control of local government, doing business on so large a scale that

the economic safety of lesser business units and of millions of individuals is dependent on the policies and decisions of a handful of administrators in strategic positions. A third factor is the growth of the democratic idea and the desire to maintain the power of government, representing the mass of individual citizens, superior to the power of single enterprises, however large they are, whatever may be their financial strength, and wherever they may extend their operations and their influence. The fourth factor is the development of a humanitarian sentiment throughout our society. It is this sentiment which denies the validity of the iron law of competition, of the survival of the fittest in the economic struggle. It is this sentiment which favors the extension of government protection to the weak and the incapable.

Characteristics of Government Control. As we review the history of government control of business, we can trace its development through three clearly marked stages. The first was piecemeal control, industry by industry and situation by situation. This extended throughout the second half of the nineteenth century and the early decades of the twentieth century. The second stage was inaugurated in 1933 under the popular title of the New Deal; it represented a program of broad control of the entire economy, a move toward central planning for our society as a whole. The third stage is the complete centralizing of all power, authority, and responsibility in time of war.

In the first stage of piecemeal control, business-government relationships were accidental, rather than planned. The westward expansion of the railroads, their competitive struggles, and the weak position of farmers and middlemen purchasing transportation service led to an attempt to control interstate railroad systems through the agency of The Interstate Commerce Commission. Resort to this body as a control agency was not regarded as part of a broad program for extending public authority over private business. The railroad problem of the 1880's was a special situation resolved by special action.

A similar fundamental attitude characterized earlier legislation whether designed to modify conditions of employment in factories, to control the trusts in the 1890's, or to extend special authority over the increasing number of local public utilities. Each situation was handled as a special case. Legislation was designed to fit particular circumstances, and no attempt was made to extend

special authority into the major economic functions of demand, supply, and price. There was no unified program of control. In fact, if any fundamental attitude can be discovered in all this legislation, it must be described as a modification of the old laissez-faire system, under which business was allowed to function as freely as possible, with governmental authority exercised only in cases of extreme friction. Government, whether state or federal, occupied the traditional position of umpire, with the task of stating the rules of the game and seeing to it that competitive business obeyed the rules. Whatever restrictions were laid down could be regarded as exceptions to the basic policy.

The prolonged industrial depression which began in 1930 brought this country face to face with a multitude of new economic and social problems. It is true that many of the problems were old ones which had been covered over in the prosperous 1920's and which were exposed for the first time in the period of acute economic depression. The failure of private business enterprises to maintain full production, full employment, and reasonable security for the mass of the American citizens — the paradox of poverty in the midst of plenty — set the stage for the introduction of the broad central policy of governmental control. For the first time public authority struck at the heart of the competitive economy by controlling the central functions of supply, demand, and price. For the first time governmental control of business was extended through the economic system as a comprehensive policy rather than as a piecemeal, unplanned attack upon special cases of economic friction.

With the onset of war in December, 1941, a new stage of governmental control began. Brought to battle with totalitarian states with their centrally controlled industrial organizations, this country soon recognized that it could not win the war by allowing business to function in a normal peacetime manner. The economic resources of the nation had to be organized under centralized authority. Every factor of production — raw materials, supplies, power, administration, and labor — had to be directed toward the single end of winning the war. Centralized control had to be extended over the supply of scarce materials, prices had to be fixed, business men and working men had to give up many of their cherished liberties in order that the entire production machine could be devoted to the war effort. Within the space of a very

few months we exceeded the centralization of control found necessary in 1917 and 1918.

What will follow the end of the war no one can safely predict. It is difficult, however, to escape the conclusion that for some time after the war has ended, government control will be maintained over the business system. The tasks of transfering a war economy back to a peace economy will be complex in the extreme. It is possible that the extent of governmental control of business in the post-war period will exceed anything known in the 1930's. It is certain that we shall not return to the piecemeal control of the latter half of the nineteenth century. The character of the free enterprise system and of the business units which have grown up in that system make it necessary for government to enter as an active participant in the direction of economic affairs.

GOVERNMENT CONTROL — PUBLIC UTILITIES

The problems encountered when we consider the application of governmental control to private business are numerous and complex. There are varieties of policies, varieties of techniques, and varieties of results. To attempt to summarize them in a series of general statements would be both misleading and oversimplified. For this reason, the following pages contain only a selection from the complete range of problems, illustrated by the description of business-government relations in a few industries. The public utility industry is considered first.

Nature of the Public Utility Business. Business concerns engaged in supplying gas, water, telephone, electric service, and local transportation are usually described as public utilities. These enterprises differ from other business units in at least two important respects. First, they supply vital services to people living in urban communities. Failure of any one of these services disrupts city life; failure of several is a prelude to chaos. Second, they are "natural monopolies." To secure the most efficient performance of services and to avoid duplication of facilities, it appears to be desirable to permit each public utility to operate in a community without competition.

Most public utilities require large investment in plant and equipment. Capital investment in the public utility industry, per dollar of gross revenue, is almost six times as great as capital investment in manufacturing industries. Thus, overhead costs make up

a very large part of total costs of production in the public utility industry, while variable costs are relatively small. Once the necessary facilities have been set up, adjustments to expanding sales volume can be made at slight extra cost. These characteristics of the cost structure of firms in the industry explain the potential economies of large-scale production and distribution and support the argument that the essential nature of these industries favors monopolistic operation.

The Foundation of Regulation. These conditions make it obvious that there is a deep public interest in the operation of utilities. In the absence of the ordinary controls of competition in the supply of services vital to the public welfare, governmental regulation has been resorted to. The twin factors of rates and service have been the subject of regulation by public authority. Justification for regulation lies in the grant by government of a right to operate as a monopoly. This grant is balanced by a reservation of authority to a governmental agency as a safeguard against the abuse of monopolistic power and a guarantee of the provision of satisfactory service. Utilities are required to make their services available to all, without discrimination, to the extent of their capacity. Their earnings are limited to a reasonable rate of return on invested capital. The history of regulation of public utilities poses many of the problems commonly encountered in business-government relationships.

The Development of Regulation. During the nineteenth century, public utilities were regulated largely by legislation and franchise. Municipalities and states attempted to define by statute standard services and rate levels. Failing this, they included service and rate provisions in the franchises which granted utilities the use of public thoroughfares as rights of way.

These regulatory devices suffered from certain obvious handicaps. Legislation had to be modified and amended continually in adaptation to changing conditions. The uncertainties arising out of these periodic restatements of statutes handicapped utilities in seeking new investment funds. Franchises, on the other hand, often granted rights which enabled utilities to profit unduly from monopolistic privileges. Recognition of the dual set of difficulties led to the demand for a more flexible regulatory technique which would provide adequate safeguards for the public interest and make possible ready adaptation to dynamic operating conditions.

During the past thirty years regulation by statute and contract has been replaced in almost all states by regulation by special public utility commissions. The commissions have authority to maintain continuous control and supervision over utilities, to compel the supply of reasonable services, and to establish reasonable rates. Appeal from commission rulings may be made to the courts.

As might be imagined, an extensive history of litigation has been recorded relative to the powers of regulatory commissions. The most disputed question has been what constitutes a reasonable rate. For while the immediate public interest places on the commission the duty of preventing utilities from charging exorbitant prices for their services, the immediate interests of the utilities and their investors and owners (as well as the long-run interests of the community in the provision of adequate service) requires that rates be high enough to provide a fair return on invested capital. In this connection, a series of related problems arises with respect to property valuation, reasonable operating expenses, and a fair rate of return. It will be enlightening to examine briefly some of the difficulties which are encountered.

Valuation of Property. Public utility rate regulation is founded on the theory that rates should be maintained at a level high enough to cover the cost of supplying the service and to provide a reasonable return on invested capital. Measuring the "fair" value of a property on which a "fair" return is to be earned thus becomes one of the crucial problems for a regulatory commission. Operating companies are interested in securing acceptance of as high a valuation as possible. It is in the interests of consumers to secure a valuation as low as possible.

A struggle between commissions and operating companies has proceeded for many years over how to measure the value of utility property. The two chief valuation techniques have been the "historical cost" method and the "reproduction cost" method. In general terms, historical cost represents the actual total outlay incurred in constructing or purchasing all property used in the provision of services. It is the sum of original investment, all subsequent investments, and all reinvested profits. Reproduction cost is the cost of reproducing existing equipment at current prices.

In a period of low prices, such as prevailed prior to 1914, utilities favored the valuation of their properties for rate-base purposes by

the historical or original cost method. Consumers' representatives favored the use of the reproduction cost method (1) because in a period of low prices utility properties could be reproduced relatively inexpensively, and (2) because they were opposed to including in the valuation serving as rate base the cost of acquiring properties at extravagant prices, unreasonable promoters' or lawyers' fees, or outright waste.

These positions were reversed in the succeeding decades which were generally characterized by higher prices. Now the reproduction cost method yielded a higher valuation than the historical cost technique. Consumer representatives argued for historical cost less imprudent expenditures. The utilities supported the reproduction cost method.

Commissions and courts have usually sought a compromise between the two evaluation systems. Students of rate problems have supported a "prudent investment" system for the determining of the value of utility properties for rate-base purposes. In terms of this analysis, prudent investment represents the original cost of the properties, provided they have not been acquired wastefully or at exorbitant prices. No allowance would be made in the rate base for waste, graft, or improvidence.

Determining the Rate of Return. Even after agreement has been reached on the value of utility property, there still remains the vexing question of what is a fair rate of return. For many years, the commissions and courts have favored the traditional interest rate of 6 per cent. But some courts have held that a rate of return below 7.5 per cent would be confiscatory, and a return as low as 4.5 per cent has been termed fair in a depression period.

Basic to the problems suggested by these contrasting attitudes toward a fair return is the question of what earning rate is required to secure the flow of investment funds necessary to maintain satisfactory service for consumers. Subsidiary to this question is the problem of whether earnings should be maintained at a single level during prosperity and depression periods, or adjusted to fluctuations in general industrial earnings.

Inasmuch as utilities occupy a protected position with respect to competition, investors should be willing to accept a somewhat lower earning rate than would be satisfactory in other industrial areas. This does not resolve the difficult problems raised by the complex capital structure of public utility enterprises. It should be noted

that in an enterprise financed by the usual combination of bonds, preferred stock, and common stock, the full impact of a change in the rate of return on the existing rate base would be borne by the common stockholders alone. They would be the beneficiaries of an increase in the permitted earning rate, since the other investors would hold fixed-income securities. For the same reason, they would bear the major burden of a decrease in the permitted earning rate.

Determination of a fair rate of return is further complicated by the difficulty of accounting for operating expenses. Lack of uniformity in accounting systems, complex financial relationships between operating companies and holding companies, and variations in depreciation allowances, as well as inflation of accounts, all combine to make the task of the regulatory commissions extremely difficult. Yet another set of problems is met when state regulatory commissions encounter interstate utility operations, as when a utility sells its power across a state line. The federal constitution withholds from states the right to regulate interstate commerce.

The Emergence of Federal Regulation. As a direct result of these and other difficulties in the sphere of state regulation, the federal government has been taking a more active part in public utility regulation, particularly in the electric power industry. The Water Power Act of 1920 created the Federal Power Commission authorized to control the development of electric power projects on navigable streams and public lands. The authority of the Commission was extended in 1935 by the Federal Power Act which was directed toward the promotion of exchange of power between public utility systems and the strengthening of regulation where state authority was weak or non-existent. In particular, the Federal Power Act reinforced state regulation by assuring federal regulation of wholesale power rates wherever interstate commerce is involved.

The Public Utility Holding Company Act, 1935, provided for federal control of public utility holding companies. Power was vested in the Securities and Exchange Commission. This legislation was aimed at the alleged abuse of the holding company device which for 20 years had been utilized in the construction of vast combinations of tiers of operating and holding companies in the utility industry. The concentration of financial control, the possibilities for inflation of operating costs and purchase prices, and the potential financial instability of some of these hastily constructed

empires led to a demand for regulation which no state could legally impose.

To make this control effective the Public Utility Holding Company Act gave the Securities and Exchange Commission authority to supervise and regulate all securities issued by public utility holding companies. It authorized the Commission to devise and enforce a uniform accounting system for such holding companies. Finally, in the so-called "death sentence" provision, the statute directed the Commission to effect a simplification of holding company combinations both geographically and financially.

Public Ownership and Operation. During the past two decades, many critics of existing regulatory devices have urged the development of power projects under direct federal ownership or supervision. It has been argued that such projects would serve as "yardsticks" for measuring the efficiency of private operation. The proposals have, of course, been opposed by the privately owned utilities and by others who fear the encroachment of government upon areas previously exploited by private enterprise.

The passage of the Tennessee Valley Act in 1933 marked the first major step toward a public power project under federal supervision. The Act created the Tennessee Valley Authority to administer a broad program for power development, flood control, and conservation throughout the Tennessee Valley. It was an experiment in regional development, cutting across state lines, and designed to bring aid to one of the country's economically backward areas. The Authority was authorized to produce and sell surplus power not required for the operation of federal properties.

Critics have seen the T. V. A. program as the entering wedge for federal competition with privately owned utilities. They have challenged the adequacy of the "yardstick" concept, pointing out that no satisfactory allowance is made for taxation or for return on the initial investment. In reply, the T. V. A. has contended that it has discovered a vast new market for power through its lower rate schedule. It has pointed out that neighboring privately owned utilities have experienced increased gross revenues following their rate reductions and have tapped a mass market of whose existence they had been unaware.

Public ownership of utility facilities may also be discovered in the history of municipal ownership and operation of the supply of electricity, gas, and water. The number of municipally owned

electric utilities has increased rapidly in recent years. This development has been extended by cooperative consumer ownership under the sponsorship of the Rural Electrification Administration, created in 1934. This agency was devised to extend facilities for distribution of electric power in rural areas. It has aided farmers to organize consumers' cooperatives to bring electric power to areas in which it had not been commercially profitable for privately owned companies to expand.

GOVERNMENT CONTROL — AGRICULTURE

As a contrast to the problem of business-government relationships in the public utility industry, it may be profitable to examine control devices in the field of agriculture.

Background of the Farm Problem. American agriculture was relatively prosperous in the decades prior to the outbreak of World War I. The war set in action forces which exercised a destructive influence for the next 20 years. The battle-scarred European continent could no longer supply its basic food requirements, and a new export market was suddenly thrown open to American agriculture. High prices led to intensified efforts to increase production and to bring hitherto waste areas into cultivation. Diversified planting was abandoned, land values skyrocketed, and farmers were swept up in a speculative frenzy that made some rich, but set the stage for the farm depression of the next 20 years.

After 1920, the balance of supply and demand again shifted. The European markets were closed as agricultural production was renewed on the continent. In the effort to become self-sufficient France, Germany, and other countries offered bounties to home producers and erected tariff walls against agricultural imports. American farmers were left with their expanded production, farm lands mortgaged at high wartime levels, and a domestic market too small to absorb the products of the land. The demand for agricultural products was further curtailed by the substitution of trucks, tractors, and automobiles for horse power (cutting requirements for feed), and significant changes in dietary habits which reduced per capita consumption of such products as wheat, other grains, potatoes, and meat. The failure of farmers to curtail production in proportion to the decline in consumption forced prices down and created the depressed conditions under which American agriculture struggled in the 1920's.

American farmers are a powerful political group. Throughout the two decades following the close of the war their representatives in the federal congress pressed for programs of aid and solution. Out of this background evolved a series of relief measures which, in review, suggest a number of interesting problems in business-government relationships.

Stabilization Programs. The fundamentals of farm relief can be stated very simply. Supply and demand were out of balance. Because of the nature of agricultural industries, with their multitude of small producers and uncertain control over quantity and quality of production, it was difficult to secure even annual adjustments of production to consumption.

These conditions suggested the desirability of instituting stabilization programs, under federal sponsorship, designed to bring supply and demand into balance by withholding surplus production from the market in years of bumper crops and selling the stored surplus in years of poor crops. Storing the surplus would, in theory, prevent prices from dropping to disastrously low levels. Selling the stored surplus in lean years would prevent prices from rising as high as they might be pushed by an excess of demand over supply.

The first major attempt at stabilization was undertaken by the Federal Farm Board under the authority of the Agricultural Marketing Act of 1929. At first, the Board encouraged farmers to organize cooperatively and gave financial assistance to action by cooperatives designed to withhold surplus production from the market. Such limited action soon proved ineffective, and the Board itself undertook stabilization on a national scale. In November, 1930, the Farm Board began to purchase and store wheat. It was expected that this operation would peg the domestic price for wheat at the Board's purchasing level of 70 cents per bushel. By May, 1931, the Board had accumulated 250 million bushels of wheat and had maintained the domestic price of wheat well above the world level. When the purchasing program was abandoned, the American price declined to less than 50 cents per bushel. A similar surplus-purchasing program for cotton resulted in the accumulation of over 1.3 million bales.

It was clear that such a stabilization effort could be successful only in a temporary emergency period. The continued fall of agricultural prices in the world-wide depression of the early thirties, and the failure of farmers to curtail production put the Board in the

position of purchasing an ever-increasing surplus at prices which became more artificial with every passing month. The huge stored supply hung over the market as a constant threat to the price structure. At the same time, continued buying by the Farm Board encouraged farmers to increase production, thus making the unbalance of supply and demand more serious.

Crop-control Programs. The Agricultural Adjustment Act of 1933 attempted to solve the farm problem in a different way. In this legislation recognition was given for the first time to the desirability of controlling supply as well as prices. The principal techniques included crop-control agreements, marketing agreements, taxation of production in excess of specified quotas, purchase of surplus stocks of designated commodities, and stabilization loans.

Crop-control agreements were negotiated between the government and individual producers of many staple crops, such as wheat, corn, tobacco, and cotton. The producers agreed to reduce production and in return received benefit payments. To raise the money for benefit payments, a tax was levied on the first processor of the staple commodities, with the expectation that it would be passed along to the final consumers.

The Agricultural Adjustment Act was operative until January, 1936, when several of its major provisions were held unconstitutional by the Supreme Court. It was successful in inducing some curtailment of production. Because of the pressure of such other factors as the revival in general business and the devaluation of the currency, it is difficult to determine its direct effect on farm prices. During the period of the Act's application, farm incomes rose appreciably, and the increase was especially marked for the staple commodities in the crop-control program.

A new farm program was initiated by the Soil Conservation and Domestic Allotment Act of 1936. This legislation attempted to secure the advantages of production curtailment through a program of conserving the nation's soil resources. Farmers who agreed to withdraw part of their land from production of cash-crops and replace them with soil-conserving crops received benefit payments. Supplementary legislation was embodied in the Agricultural Adjustment Act of 1938 which, in addition to continuing the conservation program, authorized what were termed "parity payments" to producers of five agricultural products: wheat, corn, cotton, tobacco, and rice.

In the terms of the Act, parity payments were designed to pay to producers the difference between current market prices and so-called parity prices which would give these commodities their pre-1914 purchasing power in terms of manufactured goods. The Act also provided for setting quotas for the basic crops whenever total supplies were in excess of market requirements. Quotas had to be approved by the producers of the basic commodities. Producers who did not observe the restrictions set by the voluntarily adopted quotas were punished by being declared ineligible to receive soil conservation benefit payments and by the imposition of substantial taxes on surplus production.

The Act looked toward the establishment of a so-called "ever-normal granary" plan which resembled the stabilization efforts of of the Federal Farm Board in 1930 and 1931. Loans were made to farmers to aid them in storing surplus output and withholding it from the market. The added crop-control features, it was asserted, would make stabilization workable, balance supply and demand, and maintain a reasonably secure price level for farmers.

GOVERNMENT CONTROL — FINANCE

Business-government relationships in the finance area present problems of a very different nature. The commodities and services with which regulatory legislation and commissions must deal are not necessities, nor are they purchased by the mass of common citizens. On the other hand, the opportunities for experts and "insiders" to benefit at the expense of innocents and "outsiders," the importance of the flow of investment funds into industry, and the record of abuse of positions of financial trust all mark the significance of extending government regulation into the financial aspects of business organization.

Throughout the nineteenth century and the early decades of the twentieth century regulation of security issues was practically non-existent. Investors who lost heavily as a result of their purchases of securities had only the protection of the common law against fraud. But a charge of fraud was hard to sustain. The complexity of the operating and financial information to be analyzed in appraising offered securities, the ease with which significant facts could be hidden or distorted, and the difficulty of private investigation into the investment background of new issues combined to

render the individual investor nearly helpless in his position as purchaser.

State Regulation. The first public regulation of security issues occurred in 1911 when the state of Kansas enacted the initial "blue sky" law designed to control fraud and planned misrepresentation by licensing dealers and requiring new issues to gain the approval of a state official.[1] Other states followed this lead. But legislation was not uniform in the several states and did not apply to transactions across state lines. The familiar difficulty was encountered by states in regulating interstate commerce.

Federal Regulation of Security Sales. The disclosure by Congressional investigations of frauds and irregularities in the sale of securities during the boom years preceding 1930 led to an insistence on federal regulation. The Federal Securities Act of 1933 was designed to require the provision of full information to prospective buyers of securities and to compel corporations and investment banks to accept full responsibility for misrepresentation. It was specifically stated that the Act was designed merely to guarantee the presentation of complete, truthful information on the basis of which investors were free to evaluate and act.

In the following year the Securities and Exchange Committee was created to administer the Act. New issues of securities had to be registered with the Commission 20 days prior to public offering. Full information about the financial history and current condition of the issuing company, names of responsible officials, purposes for which funds would be used, and similar data must be supplied. Misrepresentation of significant facts was ground for suit by purchasers against responsible officials and investment bankers handling the issue.

Federal Regulation of Security Exchanges. One step beyond the initial sale of securities is the secondary distribution which takes place on the country's organized security exchanges when previously issued securities transfer ownership. More than twenty security exchanges have been in operation in leading cities throughout the country. The largest and by far the most important and influential is the New York Stock Exchange.

Investigation of stock exchange operations following the 1929

[1] The name "blue sky" law was applied to legislation regulating the issuance of fraudulent securities which might be framed with such deception as to attempt to sell even "patches of blue sky."

collapse of security prices revealed the existence of methods and practices which did not give adequate protection to the interests of investors. Organizations of speculators and brokers to manipulate security prices, issuance of fallacious news-tips, and the stimulation of artificial market activity were a few of the many practices on which the investigations threw their spotlight. Given the reformist temper of the depression era, the provision of governmental regulation was inevitable.

The selected vehicle was the Securities Exchange Act of 1934 which was designed to regulate stock market practice and procedure, to control the extension of credit in connection with the purchase of securities (limitations on "marginal" trading), and to compel the provision of more complete information about securities bought and sold on exchanges. Stock exchanges were thus brought under the immediate supervision of the Commission.

The history of governmental regulation in the finance area is so brief that questions of the type and the extent of controls are still actively debated. It is not clear what relation, if any, exists between the protection of investors and the maintenance of active security markets. Nor has debate ended about the functions of speculators on the exchanges, their contribution to active markets, and the variety of controls which should be exercised over their activities. No one disputes the basic purpose of regulation designed to remove opportunities for fraud and misrepresentation and to compel the supply of full and truthful information. How much regulation, what type of regulation, and how to apply regulatory devices are questions still awaiting final answer.

GOVERNMENT CONTROL — TRANSPORTATION

As a final illustration of the problems of governmental regulation and control, let us consider some aspects of business-government relationships in the field of transportation.

Background for Regulation. The economic characteristics of the transportation industry resemble those of the public utility industry more closely than they do those of agriculture or finance. Although there is competition today between such different transportation agencies as railroads and trucks, or where geography permits, between these two agencies and ocean, coastwise, lake, or river carriers, much of the transportation industry is monopolistic

in nature. The efficient operation of the transportation system is, of course, essential to the smooth functioning of the economy. We have already observed the dependency of mass production on mass marketing, and of mass marketing on the rapid, safe, and inexpensive movement of commodities.

These considerations suggest that there is a substantial public interest in the transportation industry. Our nineteenth-century experience with unregulated transportation — particularly with unregulated rate-making — made it apparent that the social effects of private decisions were too important to permit them to be made free from all supervision.

Determining Rates. Rate-making presents an unusually complex variety of problems. Throughout the transportation industry overhead costs (which continue unchanged regardless of the volume of traffic handled) make up a large proportion of total costs. Once a transportation system has been constructed, the costs of handling additional traffic are slight, up to the point when the system is working at peak capacity. As a result, it is advantageous to attempt to increase traffic by quoting low rates. This applies to increasing the total traffic handled, to increasing traffic between points handling only a small volume, and to increasing traffic moving one way on a system when the bulk of existing traffic moves the other way.

Without regulation, transportation systems would attempt to frame their rate schedules so as to secure the greatest possible net profit on the operation of the system as a whole. This might be accompanied by grave injustice to particular shippers, particular types of freight, or particular cities or regions. The old system of "charging what the traffic will bear" represents the application of this policy. Under this system of rate-making, the value of the transportation service to the shipper is the basis for calculating rates which are set just below the level at which they would discourage the movement of traffic by making it unprofitable. Arbitrary discrimination is inevitable in such a system of rate-making.

Early Regulation. Units of the transportation industry, as it grew in the nineteenth century, exercised tremendous economic power through their uncontrolled jurisdiction over rate schedules. Where monopolistic conditions prevailed, there was nothing to prevent the setting of exorbitant rates, discrimination against products, localities, or individuals, or the provision of inadequate

service. It was an industry which seemed especially marked for regulation.

The earliest attempts at regulation were made by the states. Regulatory provisions occasionally were included in newly granted charters. These were necessarily inflexible, not readily adapted to changing conditions, not easily revised. Legislation was enacted governing safety conditions, but this had no connection with the problem of rates. Regulatory commissions were also created. No uniformity could be secured between the states, however. To make matters worse, many of the state commissions had little but advisory power. And the final obstacle was the old difficulty of controlling interstate commerce.

Federal Regulation. These difficulties, added to the growing public clamor against discriminatory practices of many railroads, prepared the way for a program of federal regulation. The first step was the passage of the Interstate Commerce Act of 1887. The Act created the Interstate Commerce Commission with authority to prevent the imposition of unfair rates, discrimination in all its manifestations, and other objectionable practices.

Although the Commission was handicapped in its early years by several adverse court decisions, its position was buttressed after the turn of the century by later legislation which extended its authority to virtually every aspect of the railroad industry, express companies, pipe lines, and communication. The Transportation Act of 1920, passed in connection with the return of the railroads to private operation after the years of government operation during the war, gave the Commission authority to fix exact rates to be charged by carriers. This authority was further extended by the Emergency Transportation Act of 1933, governing railroad holding companies.

Regulation has been extended to other types of carriers. The Interstate Commerce Commission has regulatory authority over all types of water traffic operations under the control of railroads. The Shipping Board, under the Department of Commerce, exercises certain authority over intercoastal traffic. The general effort has been to maintain a fair level of competition between water and rail carriers.

The growth of the motor truck industry as a serious competitor of existing traffic agencies has led to further regulatory action. The states' interest in highway construction and maintenance, and in

safety, has been the foundation of legislation governing speed, size, and weight of truck carriers. The usual uncoordinated assortment of state laws developed. This was particularly harmful in connection with the growth of interstate freight movement by truck carriers. In the effort to bring at least this section of the industry under uniform regulation, the Motor Carrier Act of 1935 brought under the authority of the Interstate Commerce Commission motor transportation of passengers and freight in interstate commerce.

Coordination of Transportation Systems. The presence of monopolistic conditions in some parts of the transportation industry, destructive competition in other areas, and the unplanned growth of alternative services in areas which cannot fully utilize these services have all contributed to the current disjointed national transport web. Regulation has been dispensed among dozens of agencies, some state, some federal, with varying authority, policies, and aims. The railroads, major units in the nation's transportation system, have in many instances labored under a topheavy burden of overhead charges, the result of extravagant financing and unplanned development.

Current debate springs from these considerations as factors impeding the organization of an efficient, coordinated transportation system. Schemes for consolidation under federal sponsorship have been brought forward, and their proponents have called attention to the possibilities for elimination of duplicate facilities, joint use of terminals, and pooling of equipment which such plans would permit. Other suggestions incline toward the acceptance of the proposition that public ownership, particularly of the railroads, is the only way to bring the desired unification and at the same time remove the heavy financial burdens shouldered by many of the roads. Supporters of this line of reasoning are inclined to argue that in the transportation industry regulation has been an unsatisfactory substitute for outright public ownership.

Short of ownership, some effort to unify and coordinate the regulatory agencies seems an inevitable first step toward a rational transportation industry. This would remove many contradictions in current regulatory policy and clarify state and federal efforts to control. Probably more than in other industries, government regulation of transportation has been handicapped by conflicts within itself, by the failure to frame a broad fundamental line of policy, and by the simultaneous existence of separate control

agencies with authority over sections of what is essentially a single industry.

CURRENT TENDENCIES IN REGULATION

When these brief observations on regulatory problems in a selected group of industries are added to the earlier discussion of the regulation of competition (including the control of the central factors of supply, demand, and price), it is possible to frame some conclusions about current tendencies in business-government relationships.

We may observe a persistent faith in competition as an automatic control. The absence of competition is regarded as an immediate cause for the creation of state and federal regulatory agencies. The weakening of competition calls forth legal and administrative efforts to restore it to its full intensity. And yet the underlying trend appears to be away from competition in its fiercer aspects. Evidence to support this observation can be discovered in developments in both production and marketing.

The direct result appears to be a rapid flowering of a multitude of regulatory and control agencies. More and more sections of the economy are being regulated. Special agencies are multiplying, authorized to investigate, recommend, and regulate. Related to this development is the growing interest in and provision for direct production by government itself. Education, recreation, and public safety have been traditional areas for government. To these we are adding social insurance and even the production of goods and services. Public power projects suggest the possible extension of governmental activity in direct competition with existing private enterprise.

Fundamental to all current trends is a developing belief in the concept of *public interest*. There is widening recognition of social and economic interrelationships. Out of this recognition comes a willingness to see the government intervene directly at critical points in the free enterprise system, primarily as a stabilizing or security-providing agency. As we enlarge our perspectives to consider the public interest in the national welfare, it is difficult to avoid concluding that the future holds more rather than less regulation. This does not mean the abandonment of the free enterprise system. It may be, as many have argued, merely its adaptation to the conditions of today. In mid-twentieth-century America, the

free enterprise system cannot be the system, which worked well 100 or even 50 years earlier. The foundations of economic organization have changed. The society must change with them and must control them.

QUESTIONS, PROBLEMS, PROJECTS

A

1. What are the two basic relationships of government and business?
2. How long has the present trend toward more governmental regulation been in existence?
3. Did the government attempt to control supply, demand, and price in the piecemeal era?
4. List five illustrations of a public utility.
5. What is the proportion of variable costs to fixed costs in the public utility field?
6. Why was regulation either by legislation or franchise unsatisfactory?
7. Describe the "historical cost" method of determining the value of utility property.
8. Define the "prudent investment" system.
9. What rate of return has traditionally been regarded as fair?
10. Why has the Federal government been taking a more active part in public utility regulation?
11. Summarize the "yardstick" argument for direct federal ownership of power projects.
12. What is the Rural Electrification Administration?
13. Why did an agricultural depression follow World War I?
14. How did the Agricultural Adjustment Act of 1933 attempt to solve the farm problem?
15. What is the purpose of parity payments?
16. Define the term "blue sky" law.
17. How does the Securities Exchange Act of 1934 differ?
18. Why is regulation of transportation necessary?
19. Summarize the history of regulation under the Interstate Commerce Act and subsequent federal legislation.
20. Why does the future promise more, rather than less, regulation?

B

1. The government tries to regulate or control the decisions of business men so that the public interest will be furthered, or at least so that it will never be harmed. The problem is one of control. What kinds of control over business did the Sherman Anti-Trust Act attempt to set up?
2. Contrast the controls attempted under the N. R. A. with those suggested under the Sherman Act? Are they consistent?
3. Compare the type of regulation under the Federal Trade Commission with that of the National Labor Relations Board. Are they similar?

4. What does the term "public utility" mean? Are police and fire protection public utilities? Is education a public utility? Is electricity a public utility? If police and fire protection — and education — are provided by the government, why should not the government also provide electricity? Or is there some valid distinction between providing public education and providing electrical energy?
5. Is not the production of low-priced automobiles the production of a public utility? Does this suggest that more governmental regulation or perhaps governmental ownership of automobile factories is desirable?
6. Why is it desirable to regulate prices for gas and electricity and "communistic" to regulate prices for washing machines and furniture?
7. What does the ratio of fixed costs to variable costs in the public utility field suggest about the ability of the industry to expand the volume of production economically? What does it suggest about the desirability of a single, large producing unit in each area?
8. What are the consequences of pegging the prices of American agricultural products at a figure in excess of world market prices? Are they good or bad?
9. Evaluate this argument: The government should encourage an increase, rather than a decrease, in the production of agricultural products. The result of this policy will be to lower prices, which will in turn increase demand and open new markets, benefiting both the farmer and the consumer.
10. Is transportation a public utility in the same sense that electricity and gas are, and, as such, subject to regulation or government ownership?
11. Should the Federal government or the state governments regulate transportation? What bearing does the "interstate commerce" clause of the Constitution have on this problem?
12. Appraise this argument: Regulation of the sale of securities is undesirable. It discourages investors, makes it difficult for business men to raise necessary capital, and stifles business growth and expansion.

C

1. Since it is desirable — in the public utility field — to have a single, large producing unit in each area, there is no question of competition involved. Monopoly is desirable. As a matter of control the government may (1) encourage private monopolistic combinations and regulate them, or (2) own and operate the combinations. In the light of the history of the effectiveness of utility regulation in this country, write a paper pointing out the advantages and disadvantages of each solution to the control problem.
2. Conduct an extensive research into the history of the Tennessee Valley Authority. Then write an essay including your conclusions as to its effectiveness or ineffectiveness.
3. Conduct a classroom debate on the following statement:

   Resolved: That farm prices should be stabilized by means of a federal agency empowered to restrict production.
4. Has rate-regulation of railroads been successful? Answer this question by writing a paper, including a comparison of the effectiveness of railroad regulation with the effectiveness of power and light regulation.

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CHAPTER 29

SOCIAL PLANNING

The essential characteristic of the capitalistic system — to which we have applied the term "roundabout production," or investment before return — compels business men to plan for the future. There is no way in which business men can escape this responsibility. Everyone who invests in raw materials and plant, who hires labor, who purchases power; every merchant who lays in a stock of commodities for his anticipated customers; every doctor and lawyer who equips an office in the hope of building a growing practice; everyone must plan. The only choice is between planning wisely and planning foolishly.

The extent of the planning function varies with the size and complexity of the business unit. Planning future operations is relatively a simple matter in a small retail grocery store handling staple food products (although the high mortality rate among such stores suggests that even this simple planning is seldom performed with care). Planning becomes extremely complex in the giant corporation. Every expansion of plant, purchase of new machines, shift in inventories, development of new processes must be balanced against prospective use and potential profit. Planning also plays an important part in the direction of marketing functions. Advertising must be balanced against potential sales volume; salesmen must be employed, organized, directed, and evaluated under the guiding control of the fundamental balance of expense versus income. The organization and use of such a planning procedure, the employment of budgets as statistical records of plans and as a technique for comparing planned performance with actual results, frequently requires the full-time services of a substantial staff.

But there are other and broader aspects of planning to which, except in emergency periods, we are likely to give less attention. There is industry planning under the guidance of trade associations and similar organizations. This type of planning reached its fullest development in the codes of fair practice prepared under the National Industrial Recovery Act. Another example of industry

planning, of an entirely different character, is the control of acreage and prices for many agricultural commodities, as developed under several farm relief programs administered by the Department of Agriculture. There is land use planning, as exemplified in urban building restrictions which set aside certain areas for residential, others for commercial, and still others for industrial uses. There is state planning, carried on by special boards in a number of our states, charged with responsibility for guiding the future industrial and social development of these political divisions. There is regional planning which extends its view to the economic, social, and cultural development of large integrated sections of the country, cutting across state lines. The outstanding example of this type of planning is the work of the Tennessee Valley Authority. Finally, there is national planning which looks to the growth and health of the entire nation. Some planning of this character is always in process. It leaps to a position of outstanding importance in time of war, when the entire economic organization is brought under single, centralized direction.

The problems in this area, which will be discussed in this chapter, may be briefly summarized. Granted that the planning function is an important part of the administrative task in every business concern, to what extent does this type of planning contribute to the coordination of activities in the economy as a whole? Does private planning aid or hinder public planning? Is there any place for public planning in the free enterprise system? Toward what ends should it be directed? How should it operate? What powers should be granted to the planning agency?

PLANNING VERSUS NOT PLANNING

The most damaging criticism of the free enterprise system, from the social point of view, is the wasteful way in which it employs its assets. Critics point to the fact that even at the peak prosperity level of 1929 production was below capacity; there were idle tools and idle men, as well as available raw materials and power. They point to uncoordinated expansion programs of competing companies which result in over-investment and unusable plant facilities, the immobilization of equipment which might better have been directed into other channels. They point to the waste which results from the high economic mortality rate among small retail stores. But above all, they point to the waste which results from

the business cycle. They charge that depressions are caused by the failure to plan wisely, and they counsel that the only way to avoid depressions is to impose a substantial measure of public planning on the free enterprise system.

Planning and Free Enterprise. Defenders of the free enterprise system need not be silent in the face of these charges. Granted that there is some inability to coordinate the activities of independent business units, the impelling drive imparted to commercial activity by the free play of the profit motive cannot be overlooked. We have depressions; but we also have periods of unparalleled expansion. The nineteenth century era of railroad construction was marked by waste, graft, and planless expansion; but it spanned the country and linked the coasts, it opened vast areas for settlement, it brought inaccessible raw materials to factories and agricultural products to the populations of teeming industrial centers. There was the prosperity of the nineteen-twenties, growing in large part from the rapid exploitation of the automobile. And beyond all other considerations are the opportunities and the incentives which are provided by the free enterprise system.

But the case is not complete, on either side, until one further question is examined. Are the demonstrated advantages of the free enterprise system necessarily incompatible with a measure of planning for the economy as a whole? Is it not possible to secure a reasonable stability and security without sacrificing most of the admitted advantages of individual initiative and free enterprise? These questions are not easily answered. But when we consider the economic and social dislocations of a prolonged depression, we cannot help wondering about the possibility of a compromise. The great paradox of industrial depression — available materials and power, idle men and machines, consumers willing and anxious to purchase, and a lack of money to satisfy existing needs and turn the wheels of industry — is a challenge which is not fully compensated by the achievements of prosperity.

There are some who flatly assert that public planning on the scale necessary to control business cycle fluctuations can be accomplished only in a socialized and regimented economy. If planning is assumed to mean absolute control at the center, reinforced by dictatorial authority, this is probably true. But there are many methods of planning, and many types of control. It is possible to conceive the functioning of a democratic planning organization

through the cooperation of men who are determined to save the recognized advantages of our free enterprise system and at the same time to provide the stability and security which millions of people desire. Within the framework of the free enterprise system, such planning would not extend to all aspects of the economy. It might be planning for only a few crucial areas in the economy. It might involve voluntary adherence by business men, rather than compulsory obedience. It would certainly leave large sections of the economy free to function as they have in the past.

The Alternative to Planning. Whatever the possibilities may be, they are surely worth careful consideration. Review of the economic and social strains of the period 1930–1933 has convinced many that our society cannot survive a repetition of the experience. The disappearance of the frontier, the increasing immobilization of labor, rigidities of the price structure, the interdependency of population groups, and the disappearance of the self-sustaining family unit have all contributed to the greater severity of depressions in our time. Depression conditions breed a feeling of revolt against the system which permits them to occur. There is a widespread demand for public action to relieve distress, and to eliminate the conditions which make such hardship inevitable. In such an atmosphere legislation may be enacted and administrative controls may be enforced which strike at the very roots of the free enterprise system. A planless, piecemeal, hastily contrived set of controls may be imposed, which would result only in substituting one kind of chaos for another. And the real values, the demonstrated advantages of the free enterprise system may be utterly destroyed.

As a result of their survey of these possibilities (the reality of which was clearly demonstrated in the early nineteen-thirties), many business leaders are convinced that they must take the initiative in removing the source of the discontent. They believe that business must plan, if only to save the environment and the system which permits business to exist. They have stated their belief that what has been accomplished within single business concerns can be accomplished for whole industries and for the entire country. They believe that the risks involved in attempting to plan for the economy in this way are infinitely less than the risks involved in failing to plan.

VARIETIES OF PLANNING PROGRAMS

As an aid to our understanding of the possibility of planning within the free enterprise system, it may be profitable to review several planning techniques for which a history of experience has been accumulated.

Planning in World War I. The aims of planning in time of war are obviously different from the aims of planning in time of peace. In war, industry needs no stimulus to achieve full employment of resources, which is the typical peacetime problem. The aim of planning is rather to direct the coordination of industrial production efforts toward the single purpose of winning the war, and to prevent the unrestricted production of consumers' goods. Government control was established over strategic materials, over the allocation of machines and power, over transportation facilities, and over many prices ranging from manufacturer to retailer. Under conditions of the war emergency, a degree of dictatorial control was attained which abolished most of the common freedoms of the enterprise system. This was recognized as a necessary foundation for the achievement of a victorious war effort. But it would not readily be accepted in time of peace, nor are the control techniques of a type which would secure the peacetime aims of stability and security within the frame of the free enterprise system.

Certain aspects of the planning experience in World War I are instructive for the light they throw on other planning programs. The organization of a central bureau to coordinate the statistical materials collected by hundreds of scattered agencies, both public and private, and to compile a detailed survey of materials and labor was a measure of the greatest significance. No broad planning program can be undertaken except on such a foundation. A vast quantity of research and statistical reporting is being carried on in the United States. Without the coordinating function of some central statistical agency, however, there will be wasteful duplication of effort. Significant comparisons of the results of isolated research projects are aided by a central statistical agency. World War attempts to secure more complete information about the availability and the level of skills of workers can be carried over directly to planning in time of peace. Government labor exchanges, prepared to give employers information about unem-

ployed workers, and workers information about job opportunities in other communities, will be an important part of any rational guidance of economic activities.

Planning in the Authoritarian State. By way of contrast, it may be instructive to examine briefly the organization and techniques of planning in the authoritarian state. In such a state, control of everything is centralized, individual initiative is at a minimum. In the authoritarian state, in short, planning for the whole economy is part of the entire way of life. In any authoritarian state, planning must be centralized, because there is no individual free enterprise.

In Russia, for example, the government adopted a five-year budget which was, in essence, a national economic plan. It described the over-all production aims of the country; it determined production schedules for every industry; it determined what share of the nation's productive capacity should be devoted to the manufacture of producers' goods and what share to consumers' goods; it scheduled in advance every significant economic decision. The successive five-year plans did not in all cases accurately predict actual performance which often fell short of goal figures. For the Russian purpose, however, the several five-year plans probably worked satisfactorily. The country was going through a rapid industrialization. To accomplish this aim as speedily as possible, it was necessary to concentrate upon the construction of dams, factories, heavy machinery, and other tools of mass production, rather than on consumers' goods. Such a directed effort could be carried through only under the most rigid centralized control. It forced national sacrifice for future benefits and dictated the disbursement of consumer incomes.

Planning in the Nazi or Fascist state is also part of the general program of authoritarian control. It is supported by a policy of absolute military dictatorship. The aim of the whole program has been the construction and supply of a powerful military machine, and every other part of the economy has been subordinated to this end. The criterion for all planning has been a simple one: to what extent will this contribute to the military effort? All prices have been fixed by the control authority, all production has been directed, all raw materials have been allocated in terms of military requirements.

Regardless of the techniques (some of which may be helpful in

crisis periods in a free enterprise system), it is clear that the basic purposes of planning in the authoritarian states do not in any way resemble the basic purposes of planning in the democratic state. The values of a war economy are not the values of a free economy. Authoritarian control, extreme and ruthless in its application, would destroy the very foundations of free enterprise. The terms, the basic ideas, and the purposes are contradictory.

PROBLEMS OF DEMOCRATIC PLANNING

National planning in a free enterprise economy is in many ways more difficult than planning in any other environment. In the authoritarian state, power is, by definition, centralized, and production can be planned without concern for fluctuations in activity or problems of securing adherence to plans as outlined. In the democratic state, except in time of war, cooperation must remain largely voluntary, and individual decisions are made by every business man and every business unit. Planning in the democratic state must seek out the causes of business cycle fluctuations and direct action toward controlling them, while leaving individuals and business enterprises relatively free to carry on their affairs in the normal way. It may adopt certain methods and techniques from both wartime planning programs and planning in the authoritarian states, but they must be used in a different way and under different circumstances.

Objectives of Democratic Planning. Toward what ends should democratic planning be directed? Whatever complications may arise in working out the details, it is not difficult to set up broad objectives. The first objective is the fullest possible utilization of all available resources in such a way as to secure the maximum supply of goods and services to the people of this country. The second objective is the elevation of consumers' living standards at the lower end of the income scale. The third objective is to decrease the amplitude of business cycle fluctuations and to guarantee a greater measure of security for all. A series of subsidiary objectives might be drawn up, in connection with the rehabilitation of economically backward regions (with the Tennessee Valley experiment serving as a model), or in connection with the revival of depressed industries, or in connection with a retraining program designed to ease the transfer of workers from a contracting to an expanding industry. But these apply to particular situations and

are only expressions of the broad, fundamental objectives stated above.

Strategic Factors in Democratic Planning. What are the strategic factors in the economy of the free enterprise system over which planning might seek to extend control? Although they have yet to reach complete agreement, economists and business men have debated the cause and cure of depressions and factors leading to under-utilization of productive resources long enough to establish the existence of certain key or crucial points. Of these the most important appear to be the following:

1. The balance of private saving and private investment.
2. The relative rigidity or flexibility of prices, including rents, wages, and interest rates.
3. Business confidence and the anticipation of profits.
4. Government financing methods, including borrowing and taxation, budget balancing, and the size of the federal debt.

The list includes only a few of many strategic factors, but it will serve to suggest the type of problem with which planning must deal. To what extent could a central planning agency influence these strategic factors without sacrificing democratic methods and the roots of the free enterprising system?

It should be recognized that indirect control of economic activity through influence of selected key factors has been employed for many years. Expansion and contraction of public expenditures, the rate of taxation and the types of tax measures utilized, Federal Reserve influence over interest rates and the Reserve Board's transactions in United States bonds (so-called "open market operations"), the social security program, and other devices have been utilized. It is apparent, therefore, that some control over many of the strategic factors has already been secured. This has been accomplished within the free enterprise system and without destroying the democratic political processes.

The major distinctions between what has been done in the past (witness the devices listed in the preceding paragraph) and what might be done under a planning program are only two in number: (1) action based on fact-supported surveys; and (2) coordination of control activities. Many of these controls, that is, have been utilized without adequate statistical survey of existing conditions; and there has been little attempt to integrate the controls. They have been exercised by different and in some instances rival govern-

mental agencies. And they have become the stakes of political rivalry.

Techniques of Democratic Planning. The heart of the planning process undoubtedly would be some type of planning board or national economic council, empowered to serve as both fact-finding and advisory agency. As a democratic planning technique, it would have to secure adherence to its recommendations through its ability to convince legislatures, administrators, industries, and private business concerns of the wisdom of its conclusions. Part of the task of the planning board would be to contrast the *possible* national income, as measured by available productive resources, with the *actual* national income and to indicate opportunities for expansion. Part of the board's task would be a survey of consumer spending (1) at existing income levels and (2) at potential income levels, assuming full utilization of resources. Another part of its task might be the study of capital supply and demand, both long- and short-term and for all sizes of business units. This problem would include consideration of private and public capital demand, and might be expanded to a survey of the relation between private business debt and public governmental debt. Still another part of the board's task would be the consideration of labor supply problems. This would include the study of unemployment, its causes and its effects; possibilities of training programs; the contrast of temporary and continued unemployment; relative unemployment among skilled and unskilled workers; and a host of similar projects.

Recommendations of the planning agency might be transmitted to divisions of the federal government, to councils representing employers, employees, and consumers; to trade associations and, through them, to single business concerns. One gauge of the success of the planning agency might be its ability to persuade without coercion.

Results of Democratic Planning. It is difficult to predict the possible accomplishments of such a planning program, only the barest outline of which has been sketched in the preceding paragraphs. Full utilization of available resources, including labor power; elimination of business cycle fluctuations; and elevation of living standards for the lower income groups are by no means easy to secure. A goal this side of perfection would be acceptable if it included guarantees of freedom and initiative in the enterprise

system. But there is little doubt that planning can help to secure greater economic stability. This will contribute to an increase of business confidence in future profit possibilities, which should, in turn, stimulate business expansions.

Planning may aid in reducing the marked inequality in distribution of incomes. It may help to supply a better-trained group of workers, and assist workers with information about job opportunities in distant communities. And if the planning agency does its work thoroughly and intelligently, it can count on a growing adherence to its recommendations by business, labor, consumer, and government groups. In this connection, it has been observed that if only one-half of the effort, energy, and patriotic devotion of the nation at war could be devoted to improving economic and social conditions in the nation at peace, this country would reach and sustain a level of prosperity beyond anything it has ever known.

IMPEDIMENTS TO PLANNING

This entire discussion revolves around a single question: will business control society, or will society control business? The answer to this question is the answer to the possibility of planning in the free enterprise system.

The Power of Pressure Groups. The problem is not simple. If the purposes and methods of the contestants for control were clear, and if the contestants were united into a few identifiable groups, a decision might be easily reached. But economic and political power in the United States is fought for by countless groups with special interests, and strategic positions are won by temporary coalitions which have no basic common interests for permanent union.

In addition to the special interests of individual industries acting through their trade associations (in such matters as taxation and tariff policies), there are the interests of business as a class (often subdivided into big business and small business, or into manufacturing, wholesaling, and retailing interests), of agriculture as a class (often divided by crops), of labor as a class (split into A. F. of L. and C. I. O., and into skilled and unskilled groups), of consumers as a class (with hundreds of subdivisions), of government as a class (with political subdivisions), and of many other categories.

Each of these minute subdivisions makes up a little pressure group. Each works as effectively as it can to advance the interests

of the group. Each strives to win the support of others for what it wants by offering its support to outside interests. Each is in a position to do irreparable damage to national policies by insisting on the inclusion of provisions safeguarding its special interests. The result is that public policies are often compromises between conflicting pressure groups. It is impossible to measure the extent to which economic progress has been impeded by bickering between selfish interests in this way. It should not be implied that all these factional disputes are bad. Through their actions, many potential difficulties in translating legislation into fact have been eliminated. But their arguments are so subtle, they work by such indirect and hidden methods, that they are often the causes of serious delay in initiating necessary changes.

Balancing Opposing Interests. If business is to occupy its proper position in the social structure, it appears to be imperative that a balance be struck, at least between such major opposing groups as employers and employed, capital and labor. In our democratic society, the machinery of government is controlled by the dominant economic group. We speak of a "business" administration. England has had a "labor" government. We have had a New Deal, which has been accused of being unfairly "pro-labor." It is, perhaps, inevitable that those who contribute to the campaign victories shall have the right to influence administrative and legislative policies.

But continued dominance by a single interest group does not appear to be to the advantage of the nation as a whole. A balance of power preserves the rights of minorities, including economic groups of little significance in the national scene. This balance must be maintained, as a support for planning, as a guarantee that planning will be undertaken in the interest of the nation as a whole, and as a pledge that the recommendations of the planning agency will be accepted as disinterested. If planning is to be effective, selfish interests must yield their extreme positions, must be willing to compromise with the hope of achieving greater economic stability.

THE TREND

The underlying economic structure makes it apparent that this country is moving, and moving fairly rapidly, toward increasing control at the center. This control can be exercised with benefit to the country only if it is guided by intelligent planning. The

real danger to the preservation of the free enterprise system is not the centralization of control, but the failure to plan under the control. A democratic free enterprise system does not fail as a result of an attack from without. It fails because it is weak internally, because it does not provide guarantees against poverty and insecurity, and because it does not permit all citizens to share its opportunities of freedom and initiative.

QUESTIONS, PROBLEMS, PROJECTS

A

1. Why is some kind of planning vital to successful business operations in the private enterprise system?
2. What is the most damaging criticism of the free enterprise system?
3. Why have depressions become increasingly severe?
4. What are the objectives of war planning?
5. Why is a central statistical agency vital to the success of a planning program?
6. How does authoritarian planning in Russia differ from authoritarian planning in Germany?
7. How will the methods used to reach those objectives in a democracy differ from those used in an authoritarian state?
8. What would be the chief tasks of a national economic council?

B

1. What were the objectives of the National Industrial Recovery Act? What methods were employed under it to attain these objectives? Did these objectives and methods encourage free competition or discourage free competition? Were they consistent or inconsistent with the traditional concepts of a free enterprise system?
2. What must we assume about the government planners in order to hope that a publicly planned economy will be more effective in reaching the desired economic objectives than a privately planned one? What assurance do we have that the government agents who plan the economy will be any more far-sighted, intelligent, or scrupulous than the business men whose activities they are regulating?
3. Contrast the economic objectives of communism with those of the private enterprise system. Are they the same?
4. Contrast the methods used under communism to effect economic prosperity with those used in the private enterprise system. Which are more desirable? Why?
5. Are any kinds of economic planning compatible with a democratic political structure? What kinds?
6. In order to plan an economy without endangering basic democratic institutions, is it necessary to use only those methods which *persuade* business men to cooperate? Or may *coercion* be used? Is there anything undemocratic about

a duly enacted statute which forces a business man to do certain things or go to jail? What?

7. Would not planning be more effective if the government owned businesses instead of merely regulating them by administrative agencies? If planning is desirable, should we not extend government ownership of business?

C

1. Do some research on trade associations in the United States. What are their objectives? What are their methods? Are trade associations desirable? Should they be regulated? Should they be abolished?
2. Should *all* economic activities be planned? Write a paper suggesting the economic activities which should be planned and those which should remain free.
3. What are the basic causes of unemployment? How might a federal government labor bureau, equipped with the knowledge of labor supply and demand conditions and the power to regulate wages, lessen unemployment? Evaluate this proposal in a short essay.

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CHAPTER 30

ECONOMIC PROBLEMS OF WAR

On December 7, 1941, this country entered into a state of war. For the business economy, this meant an acceleration and an intensification of the effort which had been under way since the defeat of France in June, 1940. Between that month and January, 1941, the federal congress authorized military expenditures of almost 75 billion dollars. Following our declaration of war, discussion of the financial cost of the victory effort has indicated additional appropriations of as much as 150 billion dollars. A prolonged war will extend military expenditures well beyond this amount. These figures serve to emphasize the tremendous effect of modern war on the economy as a whole and on the operation of private business enterprises within the economy.

The entire structure of the free enterprise system is upset by the needs of a war program. The productive system must satisfy the enormous requirements of mechanized armies. Because raw materials, plants, machines, power, and labor cannot meet these requirements and at the same time continue to turn out the goods normally demanded by consumers in time of peace, consumers must make sacrifices. They must do without some of the commodities usually available to them, and they must reduce their consumption of others. In the well-known phrase, we cannot have both guns and butter, and when guns must be provided for the nation's defense, butter must be sacrificed. All productive facilities must be devoted to the manufacture of munitions and essential civilian needs. Because private enterprise cannot make this adaptation rapidly and equitably, governmental controls must be applied. As the war effort is intensified, the controls multiply. The conclusion is inescapable: for the duration of the war, the free enterprise system in its essential characteristics ceases to exist.

A number of fundamental questions are raised when we consider the implications of this shift in economic organization. What will happen to prices? Will they be controlled? If so, how? What will happen to the standard of living? How is the war program to

be financed? What types of controls will be extended over industry? How will they be applied? What about rationing of strategic raw materials? What does the concept of "total war" mean to the average citizen? A brief survey of these and related questions will be undertaken in the following pages.

THE PEACE ECONOMY AND THE WAR EFFORT

Let us start with the basic question: why cannot the normal peacetime economic organization of our free enterprise system supply the requirements of the war effort?

Total War Requirements. Examination of the requirements of total war reveals that the economic organization which serves the needs of civilians in peacetime cannot supply modern military demands. Modern armies require munitions on a scale so vast that it dwarfs any single concentrated peacetime demand. Considering the enormous size of this military demand and the speed with which it must be satisfied if military defeat is to be avoided, we readily observe that no special wartime industries can be organized to supply the military requirements. Productive units usually devoted to the manufacture of consumers' goods must be transferred to war production.

Nor is the problem simply one of size and speed. Raw materials, labor, power, and machine tools are insufficient to supply the needs of the military and civilian segments of our economy. The total production of aluminum barely suffices to meet military requirements. Rubber, copper, magnesium, steel, and other commodities develop shortages. Workers must be drawn from mass production industries to man airplane and tank assembly lines. Power to turn the wheels of munitions factories must be diverted from peacetime projects. Since, for the duration of the emergency, military requirements are more important than normal consumer requirements, there must be a transfer from consumer goods production to the production of munitions.

Price Adjustments. It is not easy to effect this transfer in an orderly fashion. In the peacetime operation of the free enterprise system, diversion of the factors of production from one use to another is usually accomplished through the mechanism of price relationships. An industry which is expanding in the expectation of securing high profits, bids for raw materials, machines, and labor. If the supply of these commodities is limited, they naturally go to

the highest bidder. Examples of this process can be found by the hundred in the later stages of the prosperity phase of the business cycle. This type of competitive bidding is responsible for the tendency of prices to advance as the rate of production increases.

It might be presumed, therefore, that the necessary transfer of productive facilities from peace to war needs could be accomplished simply by advancing prices of armaments above prices of other goods. Actually, the problem is far more complex. Transfer as a result of price adjustments is very slow. Manufacturers hesitate to abandon the production of consumers' goods at a time when customers are demanding merchandise. They fear the risks of investing in new productive facilities to supply a temporary demand. What use will they make of expensive special-purpose plants when the emergency is over? What part of their existing share of consumer markets will be captured by competitors who choose not to enter upon the production of munitions?

Competition for the Factors of Production. The attempt to stimulate the manufacture of military requirements by holding out the reward of high prices and rich profits must also cope with the disposition of other manufacturers, engaged in making consumers' goods, to bid competitively for available raw materials, machines, and tools. It would be necessary for armaments producers to offer higher prices for needed materials and facilities. In the spiral of competitive bidding, spurred on by the lure of high profits, prices of all raw materials, machines, labor, and, necessarily, finished commodities, would be driven up. Nor would there be any ceiling to limit the extent of the price advance. Inflation of the most vicious variety would rage through the economy. The essential purpose of the initial price advance — the transfer of productive facilities from peace to war requirements — would be accomplished slowly, if at all, and at a prohibitive expense.

Reliance upon price adjustments presents yet another problem. Successful wartime administration of the production organization cannot be left to the chance relationships of the price system. Individual manufacturers may prefer to produce consumers' goods rather than munitions. Workers may prefer to work in one plant or one locality when they are urgently needed at another plant. Transportation facilities may be allotted to non-essential commodities while munitions, or the raw materials to make them, stand in warehouses awaiting shipment. Scarce raw materials may be

inequitably shared between competing buyers, with consumer needs taking precedence over military needs. It is obvious that the price mechanism cannot be trusted to plan the allocation of the factors of production in the national emergency.

Peace Economy versus War Economy. What, then, can be used in its place? Study of the nation's war experience in 1917–1918 and of current transfer problems leads inevitably to the conclusion that central government authority must administer the economy in time of war. In its very nature, modern war is total war. It is the directed effort of the entire nation with the sum of its resources. It is mechanized war, raw material war, factory war, labor war, and civilian war combined in a single comprehensive frame. It is a war of the entire economy, which cannot be planned, prepared, or fought in terms of military strategy alone. It is not a question of the personal courage of individual soldiers. It is a question of the number of airplanes, tanks, guns, and ships which can be produced in a given time period, their quality, and their repair and replacement. In terms of these statements, we can begin to understand the nature and the requirements of the war economy as opposed to the traditional peace economy.

The most complex problems in the war economy center in the acquisition and disposition of the essential factors of production. In this connection, it must be remembered that the term "war economy" embraces the entirety of producing and consuming activity in the nation, military and civilian combined. The administrators of the war economy must direct the apportionment of scarce raw materials among essential military needs. They must direct the conversion of plants producing consumers' goods. At the same time they are charged with the responsibility of maintaining the civilian side of the economy at a level which will preserve health and morale and enable the war effort to be prosecuted. They must so direct affairs that maladjustments are foreseen and prevented. They must utilize a variety of control devices to attain the desired results.

Administrative Problems in the War Economy. The war effort may be supplied in a number of ways. First, the unused productive facilities of the peace economy can be put to work on war requirements. Idle plants, unused materials, available power, and unemployed labor can be assembled for the production of munitions. When it is realized that there is no reason to expect

that these factors will all be available at the same place and time, the enormity of the administrative task is readily apparent. Second, capital investment (usually by the combination of private and public funds, but in emergencies by public funds alone) can be directed toward the construction, equipment, and staffing of new, specialized munitions plants. Third, reserve stocks of munitions accumulated as part of the peacetime defense program can be immediately put to use. In the democratic states, unfortunately, these reserve stocks have not been large. Fourth, factors of production, both material and human, can be transferred from the production of consumers' goods to the production of munitions. Finally, materials which would normally be employed for repair and maintenance of existing consumers' goods production facilities can be diverted to the production of war requirements.

The Growth of the War Economy. All these methods for creating, enlarging, and supplying war industries, require extensive governmental administration. Their employment in the United States during the early months of the war effort is suggested by the following observations. After the outbreak of war in Europe in the early fall of 1939, enlarged Allied and American purchases quickened the employment of idle men and machines in this country. By May, 1940, the Federal Reserve Board Index of Physical Production stood at 115, compared with the 1935–1939 average taken as 100. One year later, the Index had risen to 148. By December, 1941, the Index stood at 169. At this level, physical production had surpassed any level previously attained in the United States, and it was rising rapidly. Unemployment had fallen by more than one-third, and the increase in consumer purchasing power had stimulated a parallel growth in the sales of consumers' goods in the civilian part of the economy.

By this time, the initial seizure for munitions production of idle men and machines was clearly seen to be insufficient to supply first a defense effort and then a war effort on the requisite scale. Construction of new production facilities had to be undertaken. Between June, 1940 (the date of sudden intensification of the military preparedness program), and September, 1941, the United States Congress appropriated more than 6 billion dollars for new plants and equipment. Private industry added more than 1 billion dollars in construction designed to supply military requirements. This may be compared with an average annual expenditure for new

plant and equipment in the prosperous 1920's of less than 2 billion dollars.

It was not until the latter part of 1941 that a beginning was made at large-scale transfer of production facilities from consumers' goods output to the manufacture of munitions. Up to this point, expanding military requirements had been satisfied almost entirely by a rise in the total level of production. It was becoming apparent, however, that there were left few unemployed resources, either mechanical or human. At the same time, the addition of new facilities was revealed as an inadequate way to supply the military establishment in its ever-increasing requirements. Serious raw material shortages were developing in the face of expanding military and civilian requirements. The supply of skilled labor was desperately short. We had reached the guns versus butter stage, and the decision was cast in favor of guns.

The conversion program began. The production of durable consumers' goods was curtailed. Home construction, the production of automobiles, refrigerators, washing machines were all reduced. Raw materials, machines, and labor were directed toward defense production. Following the outbreak of war in December, the process of conversion was speeded up. Automobile production was brought to a complete halt and all the magnificent plant of the archetype of our mass production industries was transferred to the manufacture of military goods.

Problems of Conversion. It should not be supposed that the conversion of peacetime production facilities to war uses is easily or quickly accomplished. Mass production must be planned and organized far in advance of actual output. Specialized machine tools must be devised and constructed. Labor must be trained. The flow of parts and sub-assemblies into the main assembly line must be exactly predetermined. Facilities cannot be converted overnight. Tanks do not move today down the assembly line which yesterday was turning out Chevrolets. Furthermore, many military goods require much finer workmanship than do similar civilian goods. The manufacture of an airplane engine is infinitely more complex than the manufacture of an automobile engine.

Nor can the conversion process be permitted to proceed without control. Civilian health and morale must be maintained at satisfactory levels. It has been estimated that it will be extremely difficult to devote more than half our productive facilities to munitions.

Needless to say, in the spring of 1942 the conversion process was far from that theoretical limit.

Out of the conversion process also comes the problem of price inflation. As employment increases and wages rise, the national income is pushed up. In plain terms, people have much more money to spend. At the same time, as a result of the conversion process, fewer goods are available for them. If no action is taken, consumers bid against each other for the limited supply of commodities, and prices are rapidly driven up. Price advances cause the cost of living to rise. This, in turn, leads to a demand for higher wages which simultaneously adds to basic production costs and gives consumers even more money to spend on fewer goods. This is the vicious spiral of inflation. This whole difficulty can be avoided only by judicious governmental financial policies which act, in various ways, to take away from consumers their surplus spending power.

Another basic difficulty, in connection with the conversion process, arises when the supply of a necessary or popular consumers' good is so reduced that it is far too small for existing demand. Consumers bid competitively for the commodity, drive up its price, and eventually the small supply is purchased only by the wealthy members of the community. Inasmuch as these tactics create serious inequities in the marketing of commodities — particularly when the goods are essential to the maintenance of health and morale as are parts of sound basic diets — the government must intervene to ration the commodity.

The fundamental character of the war economy is absolutely opposed to the fundamental character of the peace economy, as the description of these conversion problems suggests. As the business organization of the country passes through the several stages of conversion, governmental controls multiply. In the complete war economy, only vestiges of the free enterprise system are left intact.

PRICES IN THE WAR ECONOMY

The role of prices in the peace economy is familiar, as are the effects of price movements in their influence on conditions of supply and conditions of demand. In the war economy, however, as the preceding paragraphs have suggested, the character of the price structure is different. The special problem of price inflation is

encountered. If the threat of inflation is serious, the question of price control must be dealt with. Some of the more significant aspects of price inflation and price control will be discussed in this section. It is interesting to note that in considering the general problem of price control we are appraising a question which is wholly foreign to the functioning of the free enterprise system.

The Nature of Price Inflation. Price inflation is a rapid and substantial increase in the general price level. The causes of such a development are readily explained, although the problem of controlling prices is not a simple one. The forces at work may conveniently be separated into non-monetary and monetary factors. In the first group, dominant influence is exercised by huge government orders for military requirements. Sharp increases in the prices of certain metals, of some textile products, and of lumber (used in erecting cantonments) illustrate the effect of the sudden impact of large-scale purchasing on normal commodity markets. A parallel influence is exerted by speculative accumulation of inventories and by wartime shortages. Wage rates and other operating costs rise and help to push up prices of commodities unaffected by the factors mentioned above.

Monetary Factors. But the monetary influences are of greater importance in setting the stage for that rapid rise in general prices which we call inflation. Reduced to their simplest terms these monetary factors may be described in the following manner. The expansion of employment and the rise of wage levels and weekly earnings which begin in the early stages of the war economy put new purchasing power into the hands of consumers. They have more money to spend. They begin by paying off accumulated indebtedness, but sooner or later they descend upon the retail stores to buy new clothing, automobiles, household appliances, and more and better food. In the economists' language, there is a sharply increased demand for goods and services. In the peace economy no ill effects would follow this change in the level of consumer demand. More goods and services would be produced to satisfy the demand, and the country's living standard would rise.

In the war economy, however, it is not possible to expand the supply of consumers' goods and services. In fact, it becomes necessary to contract the supply at the very time that consumers' demand is on the rise. For, as we have observed, it is essential in the war economy first, to utilize all idle plant and labor and all

available raw materials for military production, and second, to convert productive facilities from the manufacture of consumers' goods to the manufacture of munitions.

The situation may be simply illustrated with a few figures. Let us suppose that in a year of normal peacetime economic activity, the consumers of this country have a total income of 75 billion dollars. This represents the sum of all salaries, wages, interest, dividend, and rent payments. In these various forms, the income was expended in the course of producing a roughly equivalent value of goods and services. When the national income in dollars is spent by consumers, it purchases the national production of goods and services. Now suppose war breaks out. Employment increases; wages and salaries rise. Within a few months, the national income increases to 100 billion dollars. The output of goods and services has also gone up to a roughly equivalent value. But a substantial part of the output of physical goods — it may be as much as 40 billion dollars — consists of battleships, airplanes, tanks, guns, and other military supplies which are not offered for sale in retail stores. The result, in crude and general terms, is plain: 100 billion dollars of purchasing power is attempting to buy 60 billion dollars of goods and services. Consumers bid against each other for the inadequate supply of commodities, and prices are rapidly driven up.

The danger of rapid inflation of commodity prices would be lessened to the extent that this surplus purchasing power could be removed from the pockets of consumers before they enter retail stores. A stiff tax program which would subtract 20 billion dollars from the national income would leave a balance of 80 billion dollars of purchasing power against 60 billion dollars of commodities. Other financial devices might be resorted to, some of which will be discussed in the following section. But the heart of the inflation problem is contained in this simple illustration.

The Effects of Price Inflation. The experience of this and other countries in past war periods supplies ample evidence of the general truth of this analysis of the causes of wartime price inflation. There still remains the question: what are the economic and social consequences of inflation? Why should we be concerned about it, so concerned that we immediately think of devices to prevent and control runaway price movements?

Several serious consequences of commodity price inflation can

be listed. First, inflation substantially increases the cost of financing the war. Military goods become more expensive. It becomes necessary for the government to expend larger sums than were anticipated, and the debt burden mounts to an intolerable level. Second, commodity price inflation inflicts a particularly severe hardship upon the many individuals whose incomes are relatively stable. Some attempt can be made to adjust weekly salaries and wages to higher living costs. But many individuals receive annual salaries which are not readily adjusted, and many others live on a fixed dollar income derived from insurance payments, bond investments, and pensions. Inflation distributes the burdens of the war inequitably, and often bears with the greatest severity on those least able to withstand the strain. Third, inflation threatens the security of the great financial institutions of the country, the banks and insurance companies, which have a large proportion of their assets invested in fixed-income securities. This effect spreads throughout the nation, because there is hardly a family which does not own either a savings account or an insurance policy.

These damaging consequences of price inflation — and others might be added — make it clear that any government must take all possible measures to prevent its occurrence.

Price Control Devices. How can this be done? As in our survey of the causes of price advances, we may conveniently distinguish between non-monetary and monetary devices for controlling prices and preventing a disastrous inflation.

Among the non-monetary devices we may note the effort to organize governmental buying for military purposes on a rational basis. Unplanned buying of war supplies, in which governmental agencies bid against each other or fail to time their purchases in such a way as to avoid upsetting established market schedules, can be replaced by a centralized and carefully planned procedure for buying military requirements. In addition to this program, which is not easily accomplished, the government may use its influence to discourage others from contributing to or encouraging price advances. It may threaten speculators, hoarders, and rumormongers. It may attempt to stabilize farm prices and wage rates. It may act through trade associations to secure business cooperation in resisting every effort to adjust prices upward.

Past experience indicates that all such efforts are not sufficient to prevent inflation. They delay, they do not prohibit price

advances. Ultimate solutions must be found in the area of monetary devices. Given the fundamental inflation problem of available purchasing power in excess of available goods and services, there are only two possible solutions. The first is to increase the supply of commodities. The second is to decrease the supply of purchasing power.[1]

The supply of goods and services to consumers cannot be increased in the war economy. Indeed, as the total war effort expands, every effort is devoted to reducing the supply of goods to consumers. The only possible solution is to decrease the supply of purchasing power in consumers' pockets. This can be accomplished in several ways. Taxes can be sharply increased, theoretically to the limit of paying the entire cost of the war effort out of receipts from current taxes. In the illustration cited earlier in this chapter, when 100 billion dollars of purchasing power confronts 60 billion dollars of goods and services, the excess 40 billion dollars could be removed from consumers by high taxes. A second way to accomplish the same result would be for the government to borrow the excess 40 billion dollars from consumers. In following such a program, however, it would be necessary to make certain that the money was borrowed from individuals, not from banks or other institutions which accumulate savings funds. Borrowing from individuals transfers existing purchasing power from private to government control. Borrowing from banks would have an effect contrary to that desired, because it would lead to credit expansion as the result of the creation of new bank deposits. It would not reduce existing purchasing power in the hands of consumers. As part of such a borrowing program, precautions must be taken to prevent individuals from borrowing from banks in order to secure funds to purchase government bonds. Finally, inflation may be fought by direct control of prices.

Taxation as a Control Device. At first glance, the simplest way to avoid inflation in the war economy would appear to be the institution of a stiff tax schedule designed to pay, out of current income, the full cost of the war effort. In theory, this is entirely possible. In practice, the attempt would almost certainly fall short of its goal. Taxation always lags behind the spending of income. We pay a large proportion of last year's taxes out of this

[1] Note that inflation really follows the second line of solution by reducing the purchasing power of money, making two dollars today equivalent to one dollar yesterday.

year's income. There are political obstacles, as well. A tax program designed to raise 30 billion dollars or 40 billion dollars annually must bear heavily on the lower income classes. These groups are not accustomed to the burden of heavy direct taxation and are certain to protest. Finally, the tax structure is relatively inflexible. New types of taxes must be added, in order to sop up all surplus funds, and each novel tax measure must run the gauntlet of special interest groups and their congressional representatives.

The conclusion is inescapable: part, not all, of the excess purchasing power can be drawn away by heavy taxation. In 1942, the directors of the United States' fiscal policy were thinking in terms of financing less than half of the total war costs out of the receipts from tax measures.

Borrowing as a Control Device. In recent months increasing attention has been directed to borrowing as a device for diverting surplus funds from individual consumers and for financing the war effort. Certain considerations in favor of borrowing may be pointed out. From the political point of view, it is more attractive than taxation for two reasons: first, it is voluntary rather than mandatory; second, it holds out the promise of repayment after the war is over. Borrowing is relatively easy to administer. Finally, the repayment of the loans, in the post-war period, will provide a pool of purchasing power which undoubtedly will help to ease the adjustment to the peace economy.

The major difficulty in the administration of a program of borrowing is the problem of making certain that the money is borrowed from the current income of individuals. Money borrowed from institutions like banks and insurance companies will not help to reduce the surplus fund of consumer purchasing power. Nor will the situation be eased if individuals are permitted to buy bonds with funds secured by borrowing from banks. Another difficulty is encountered when we consider the extent to which individuals can be induced voluntarily to assume the sacrifice of restricting consumption by diverting money to the purchase of government bonds, when they are already bearing the strain of a high level of taxation. Appraisal of this problem early in 1942 had led many students of war finance to urge the transfer of the government's bond program from a voluntary to a compulsory basis. They proposed the withdrawal from pay envelopes of a pre-

determined proportion of all salaries and wages (so-called withdrawal "at the source") to be devoted to the purchase of bonds.

Consideration of these problems suggests that borrowing from individuals may be a helpful device for controlling price advances when used to supplement a tax program.

Direct Price Control. The ultimate device for preventing inflation is direct price control by governmental edict. Whatever may be accomplished by taxation and borrowing, it is doubtful whether they can absorb all the surplus purchasing power. In any event, they are likely to lag behind the accumulation of income in the hands of consumers. And always there is the problem of maladjustments, of temporarily unbalanced supply and demand schedules, of the force of the *fear* of inflation as a direct contributor to the existence of the *fact* of inflation.

Direct action may appear either as selective price control or as general price control. A policy of selective price control is addressed to the regulation of the prices of only a few commodities: those which threaten to get out of line with the general price level, or those with abnormal supply-demand relationships. Selective price control has the advantage of administrative simplicity. The controls are few and adjustments are readily made. The supervisory task is limited to a small number of buyers and sellers.

Under the full impact of the war economy, however, selective price control is usually discovered to be inadequate. Commodity prices are not isolated things. One man's selling price is another man's cost. Prices are inter-related. It is exceedingly difficult, if not impossible, to limit control to individual prices. The administrator finds his problems constantly increasing in complexity. How, for example, can the wholesale price of bread be controlled without extending the control back to include wheat prices, the wages of labor, the prices of other baking ingredients, transportation costs, and many other operating expenses?

General price control is therefore offered as a more effective device, particularly as the war economy passes beyond its initial stage. Under the general price control plan, "price ceilings" are established for all commodities and services. All prices, all wages, all rents are fixed at the levels of a selected date. Changes are permitted thereafter only by consent of the price control authority.

Relatively simple in concept, a general price control plan poses innumerable problems of administration. How can the control

be policed? When the possibilities of violation are numbered in the millions, how can they be detected and punished? Who is to determine effective price maintenance for such non-standardized merchandise as clothing, or fruits and vegetables, which are susceptible to variations in quality, many of which are not apparent at the time of purchase? What provision is to be made for handling seasonal merchandise? How about the disposition of spoiled or damaged goods, or of perishable merchandise, or of merchandise which has passed the peak of its style popularity? The statement of these problems makes it apparent that price control is an extremely complex device.

Rationing, Priorities, and Allocations as Control Devices. Discussion of direct price control leads directly into that of rationing. Under a free price system, commodities are sold, in the long run, to the highest bidders. When price controls are instituted, commodities must be sold to the first comers. When the amount supplied of a single commodity is less than the amount demanded, some would-be purchasers must go without. And when that commodity is an essential one, such deprivation becomes so serious that some type of rationing must be developed, in order to secure an equitable distribution of the scarce commodity. It prevents an uncontrolled fight for merchandise by substituting a planned scheme of distribution.

The counterpart of rationing in the supply of raw materials and equipment to industry is the priority and allocation system. In the administration of the industrial aspects of the war economy, it is essential that materials and equipment be available first to satisfy the more essential needs, and later the less essential needs. The priority system attempts to set up a scheme for evaluating requirements in terms of their relative importance to the war program, assigning preference ratings which reflect these evaluations, and providing for the fulfillment of high-rated requirements before requirements bearing lower ratings. In this way, the administrator of the war economy ensures that a plant designed for the manufacture of airplane motors gets steel before a plant to manufacture tennis balls. It is, in its simplest terms, a system for putting first things first.

This type of preference rating system works well enough so long as the supply of required commodities is maintained in reasonable balance with their demand. But when shortages become acute,

the priority system breaks down. There is no longer enough of the scarce commodity to satisfy even orders with high ratings. At this point it becomes necessary to resort to direct allocation. In this phase of the war program, every unit of output of the scarce commodity is ticketed for a specified purchaser. Non-essential uses are set aside, and essential uses receive only allocated quantities at specified periods.

THE AFTERMATH OF THE WAR ECONOMY

It is obviously impossible to survey within the space of a few pages the full range of the problems encountered in the war economy. Several of the more serious and urgent considerations have been briefly discussed in the preceding pages. But what of the period after the war? In what ways, under what conditions, and with what results will the United States make the difficult transition from war to peace economy? What of the free enterprise system? How and when may it be restored?

Strains of the War Economy. The free enterprise system is engulfed in the war economy. The business organization of the country has been changed in its essential character. The central pivots of supply, demand, and price have been subjected to control. The profit motive as a generating force has been subordinated. The direction of economic effort has been diverted from the satisfaction of consumer requirements to the supply of military necessities. The industrial plant has been remodeled for the manufacture of commodities which have no market in time of peace. The financial structure of the nation has shouldered a huge government debt. Consumers have found their living standards reduced to sub-depression levels. In short, the war economy has subjected American society to strains of a kind and degree never before experienced.

Transition to the Peace Economy. The transition to a peace economy will not be easy. It will require several months, for example, to convert American industry back to the production of consumers' goods. The sudden cessation of military production will bring at least temporary unemployment. It is hoped that the accumulation of unsatisfied consumer requirements during the war period will supply a backlog of orders sufficient to prevent the occurrence of serious and prolonged depression. But a number of maladjustments must be handled. During the war it is absolutely

essential to secure rapid and marked increases in the production of many raw materials. Productive capacity will be far in excess of any anticipated peacetime demand. Labor in the war economy may be employed at different tasks and in different places than in the peace economy.

Study of these and related problems makes it clear that there can be no sudden abandonment of wartime controls. The free enterprise system as it has developed in the United States cannot suddenly replace the centralized control of the war period. The shock would be too great; it could easily precipitate economic chaos. It will be imperative to relax controls slowly over production and prices. The shocks of peace unemployment must be absorbed. Plant conversion must be spaced out over a substantial period of time. Government financial policy must be administered in such a way as to aid the transition, regardless of the effect on a swollen debt structure or an overburdened tax system. The essential problem, above all others, is to relax the military demand only as the consumer demand picks up.

Serious problems will also be encountered in the larger area of the United States' relations with the rest of the world. War destruction in every country will present an opportunity for replacement of essential productive facilities. Properly administered, this can be the foundation of a spreading prosperity. But the problems of international finance must be handled with greater skill and wisdom than was demonstrated in the decade following World War I.

Free Enterprise in the Post-war World. It seems probable, therefore, that the conclusion of the war will not be followed by an immediate return to the free enterprise system as it existed prior to 1941. There will be a gradual transition, marked by a slowly relaxing control at the center. It remains to be seen and proved whether business is prepared to accept its essential responsibilities in the free enterprise system when it is finally restored. Proved it must be, beyond any shadow of doubt, for the history of the twentieth century has a clear moral for the business man with the wisdom to understand: the free enterprise system can survive only if it can provide security with individual freedom, only if it can control risk and eliminate waste, and only if it is a free enterprise system not for just a few, but for all men.

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